FIRE ENGINEERING

The Journal of the Fire Protection Profession Since 1877

OCTOBER, 1947

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After Lines Were Ordered Out of Pier Building at Big Waterfront Fire in New York (See Article in This Issue).

A CASE - SHEPPERD - MANN PUBLICATION

EMERSON
RESUSCITATOR
FOR SMOKE, GAS, SHOCK OR DROWNING

Two victims — one unit.

Often you have an emergency where lives hang in the balance and more than one resuscitator is immediately imperative. That's why so many fire departments depend on Emerson resuscitators when their own men are knocked out as well as other victims. They're easy to operate and always reliable. Write for the complete story of the latest model today.

J. H. EMERSON COMPANY

Representatives in Principal Cities

22 COTTAGE PARK AVENUE • CAMBRIDGE, MASS.

and PROTECT YOUR INVESTMENT in *NEW* EQUIPMENT

Modern fire-fighting equipment now being delivered will step up department efficiency—but to give that equipment and its personnel maximum protection through present day crowded traffic

Specify **FEDERAL SIRENS**

Match the efficiency of new equipment with effective signals engineered for long trouble-free service. For maximum protection specify a Federal Siren with Propello-Ray Light—the most striking visual signal yet developed.

Write today for full information ask for booklet X42

FEDERAL ELECTRIC COMPANY, Inc.

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FIRE ENGINEERING

A Consolidation of FIRE AND WATER ENGINEERING, THE FIRE ENGINEER, FIRE PROTECTION *and* FIRE SERVICE

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FRED SHEPPERD
Editor

ROI B. WOOLLEY
Assistant Editor

First Things First

A PRIME requisite of engineering journalism is to get first things first—which isn't always so easy.

● For instance: this October issue of FIRE ENGINEERING was "buttoned up" all ready for the press when an inconsiderate fate saw fit to inflict the most costly pier fire in its history upon New York City.

● Normally, the story of this fire would be deferred until all the reports and the post mortems were in. But this fire in many ways was epochal—not alone because of its magnitude and long duration, and the punishment taken by the hundreds of fire fighters in their gruelling struggle to control the threatening conflagration—but because it points a weighty lesson to cities that have acquired the bad habit of accepting disastrous waterfront fires matter-of-factly.

● And so, what might be equally interesting editorial material was snatched from the forms and in its place our readers receive herein the first and most authentic account of the Grace Line pier fire to be released to the fire service.

● This story isn't just news: it's information . . . education . . . inspiration for men who take their firemanship seriously. It's the sort of technical journalism readers and advertisers alike have come to look for in FIRE ENGINEERING.

The Publishers

FIRE ENGINEERING

The Journal of the Fire Profession since 1877; published on the fifteenth of each month by Case-Shepperd-Mann Publishing Corp., 24 West 40th St., New York 18, N. Y., also publishers of *Water Works Engineering, Sewage Works Engineering*, etc. ¶Subscription price: U. S., Latin America and Canada, $3.00 a year; Foreign, $4.00; Single copies, 35c. ¶Member of Audit Bureau of Circulations and Associated Business Papers, Inc. ¶Entered as second-class matter April 15, 1929, at the Post Office at New York, N. Y., under Act of March 3, 1879. ¶Contents of this issue copyrighted, 1947, by Case-Shepperd-Mann Publishing Corp. President and Advertising Director, KARL M. MANN; Vice-President and General Manager, I. HERBERT CASE; Secretary and Editorial Director, FRED SHEPPERD; Assistant Advertising Director, WALTER H. FREDRICKS; Eastern Representative, ALFRED J. HOUGHTON; Advertising Manager, WILLIAM J. GIBSON; Circulation Manager, W. H. TOPHAM. CHICAGO OFFICE: W. S. CLEVENGER and L. M. ROCHE, 8 So. Dearborn St., Chicago 3, Ill.; SAN FRANCISCO: CHARLES H. WOOLLEY, 605 Market Street, San Francisco 5, Calif.; LOS ANGELES: AUGUST HAUSER, 6000 Miramonte Blvd., Los Angeles 1, Calif. ¶Printed in U. S. A.

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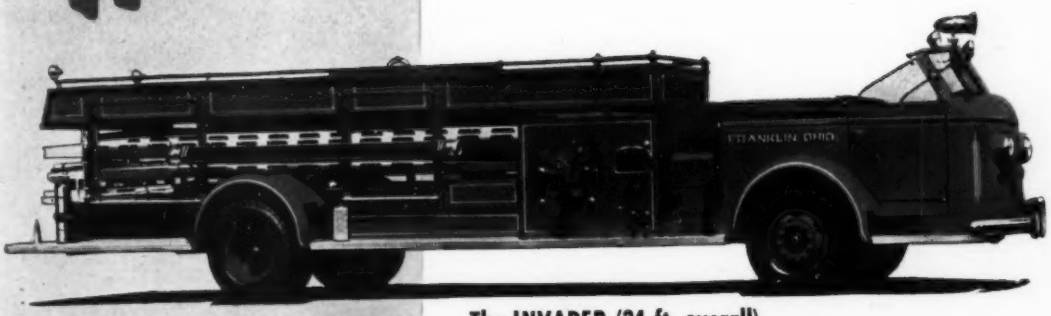
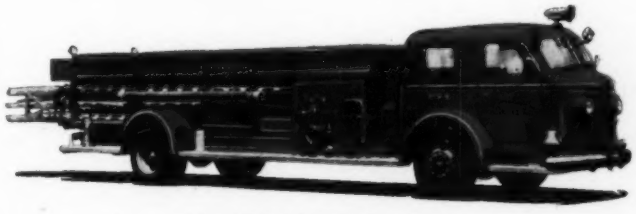


The INVADER (34 ft. overall)

THE NEW AMERICAN-LAFRANCE CAB-AHEAD-OF-ENGINE QUADRUPLE

AN efficient combination of pumper and ladder truck with outstanding pump and road performance. The short wheelbase, 220 inches, provides a maximum of maneuverability. The Cab-Ahead-of-Engine design gives a maximum of driver vision, with easy steering and proper load distribution. Available with all standard I.A.F.C. Class A rated pump capacities and a full complement of ground and roof ladders.



The SPARTAN with cab

ALFCO

AMERICAN-LAFRANCE-FOAMITE CORPORATION
ELMIRA, NEW YORK, U. S. A.

LAFRANCE FIRE ENGINE AND FOAMITE LIMITED
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DUO Safety

STRENGTH... SAFETY ...SERVICE

all Aluminum

525-A SERIES
THREE SECTION

Duo-Safety's great all-aluminum (Duralumin) 525A Series provides everything to make a really exceptional fire ladder. Extreme strength combined with easy-to-handle lightness; space-saving, overlapping construction; maximum climbing space to the top rung; reduced banking space required . . . they're all due to Duo-Safety's exclusive TUBULAR principle! And that's why Duo-Safety fire ladders are preferred by fire chiefs the country over. To be sure of the best . . . be sure it's Duo-Safety.

DUO-SAFETY LADDER CORP.
209 Ninth Street **Oshkosh, Wisc., U. S. A.**

B. F. Goodrich Fire Hose now better than prewar hose

THERE are many ways in which today's B. F. Goodrich fire hose is definitely better than the best prewar hose.

For example, a new way of twisting cotton strands has made a stronger cotton cord. A new way of weaving the jacket increases strength, eliminates weak spots and reduces weight. A new rubber compound—with greatly improved age resistance—has made the tube stronger, yet lighter. Add these all up and you get a *total weight reduction of 18%*. You've never seen a hose that's easier to handle—yet it's stronger than ever before.

There's a new *Koroseal* gasket that speeds up tight coupling—a new mildew treatment that gives the most complete protection possible—a patented end-protection that eliminates failures near couplings.

The next time you need fire hose, order B. F. Goodrich—the hose that is easier to handle and gets into action faster—the hose that outwears prewar hose and so reduces trouble and expense. *The B. F. Goodrich Company, Industrial Products Division, Akron, Ohio.*

Koroseal—Trade Mark, Reg. U. S. Pat. Off.

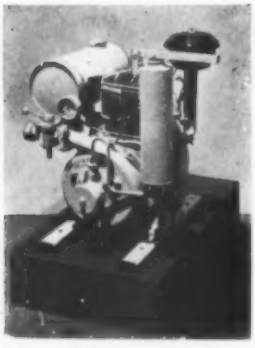
B.F.Goodrich

FIRST IN RUBBER

HALE TYPE FZZ PUMPING UNIT READY FOR USE

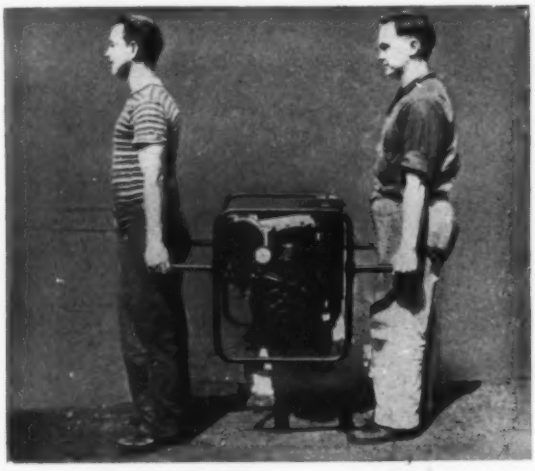
Compact — Powerful — Portable

Among many other practical uses a Hale Portable FZZ Pumping Unit is valuable for relaying water into a major pumper where latter can not get to source of water. Unit is relaying from draft into pumper; two streams, 1½" hose, ½" nozzles.



Above — FZZ mounted on rubber-insulated steel channels for movable or fixed installation.

Right—The FZZ mounted in carrying frame, is easily carried by two men.



Write today for FZZ folder. If your Fire Company is interested in a demonstration, let us know and we will forward your request to our nearest dealer.

Above — Model FZZ on handy two-wheel truck type mounting.

Below — Picture of same wheel-mounted FZZ unit pumping 2 streams through 1½" hose, at St. Johns, Newfoundland.

HALE FIRE PUMP CO.
Conshohocken, Pa.

Above picture furnished by courtesy of the Daily News, St. Johns, Newfoundland.

NEW

LOW COST—NOISE FREE 2-WAY RADIOTELEPHONE FOR URBAN AREAS

Motorola FM DISPATCHER

WITH P.S. "PRECISION" SELECTIVITY

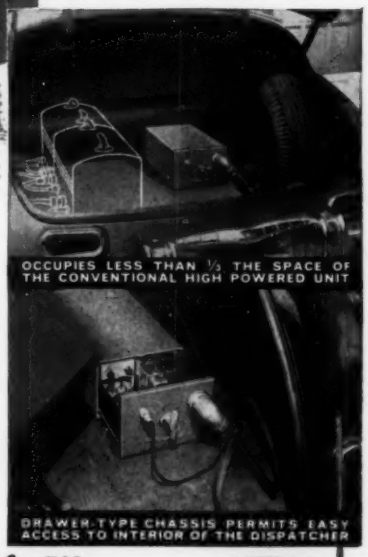
$397.50 COMPLETE plus tax

The DISPATCHER-Another FIRST for *Motorola*

The Motorola DISPATCHER is a compact, single-unit mobile radiotelephone transmitter and receiver specifically designed for use in noisy urban areas. Easy to install and maintain, with exceptionally low battery drain and highest sensitivity, the Motorola DISPATCHER is the FIRST radiotelephone unit especially and effectively designed for urban communications. The DISPATCHER comes to you as a tried and proved communications tool—after two years of design and field performance testing. It's a Motorola masterpiece!

P. S. . . "Precision" Selectivity

Now your conversations can be conducted without interference from other radiotelephones, ignition noise, sparking trolley contacts or any other electrical noises radiated in urban areas. P.S. does it—"PRECISION" SELECTIVITY—the sensational Motorola development that gives you the absolute maximum of protection against off-channel interference of *all types.*


OCCUPIES LESS THAN ⅓ THE SPACE OF THE CONVENTIONAL HIGH POWERED UNIT
DRAWER-TYPE CHASSIS PERMITS EASY ACCESS TO INTERIOR OF THE DISPATCHER

GET THE COMPLETE STORY

WRITE for illustrated, descriptive brochure giving you all the many features and specifications of the new Motorola DISPATCHER—WRITE TODAY.

The *Motorola* FM HANDIE-TALKIE IS HERE!

Now you can have instant, constant communications wherever a man can go. Smaller than a brief case, easily carried in the hand, the Motorola FM HANDIE TALKIE is the eagerly awaited answer to hundreds of communications problems. *Send for descriptive booklet.*

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COMMUNICATIONS AND ELECTRONICS DIVISION

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Fires always start at the wrong time

When fire breaks out, you must be prepared to fight it with *dependable* hose.

Hewitt Fire Hose is that kind. It's "Job-Engineered" to remain flexible and easy to handle under the most severe fire-fighting conditions.

There's a reason. Hewitt Fire Hose is made of rubber compounds which minimize elongation and twist under extreme pressures. Quality construction throughout is your assurance of high burst-resistance and long life.

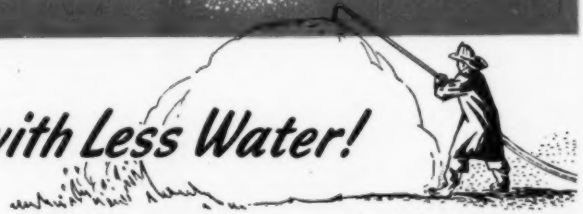
No matter when or where fire starts, be prepared with Hewitt Fire Hose. It's available in a variety of types and sizes to meet all your fire-fighting needs.

Hewitt Fire Hose

HEWITT RUBBER
DIVISION
HEWITT-ROBINS INCORPORATED
240 KENSINGTON AVENUE, BUFFALO 5, NEW YORK

HEWITT-ROBINS INCORPORATED HR

...Puts out Fires Faster with Less Water!



Half the weight of the famous Rockwood all-purpose nozzle, the new LIGHTweight special aluminum-alloy type SG-48 WaterFOG Nozzle will give you three types of discharge — one to fit every need for providing all-around fire protection.

Easy to install and operate, this amazing new improved Rockwood WaterFOG Nozzle will permit your firemen to reach the very root of the fire and to attack it without physical punishment. It will also provide them with greater protection from fire, smoke and fumes.

A simple movement of the control handle will bring the correct type of discharge to control or put out fires in both ordinary combustibles and flammable liquids.

The SG-48 WaterFOG Nozzle is recommended for use in municipal fire departments, industrial plants, chemical plants, mercantile and public buildings, oil refineries, etc.

Rockwood WaterFOG is also available in the form of fixed piping systems and are today protecting many types of equipment, processes and structures, transformers, paint shops, quench tanks, engine test cells, etc.

For more complete descriptive information, write for circular C-501R.

ROCKWOOD

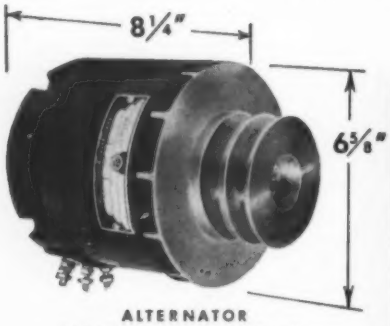
ROCKWOOD SPRINKLER COMPANY

54 HARLOW STREET WORCESTER 5, MASSACHUSETTS

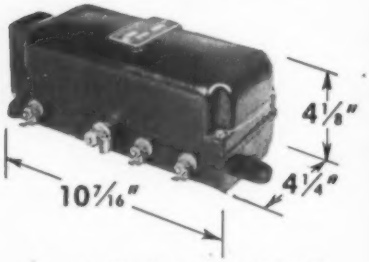
Specialists in Fire Protection Engineering, Equipment and Installation since 1907

Power for any emergency—

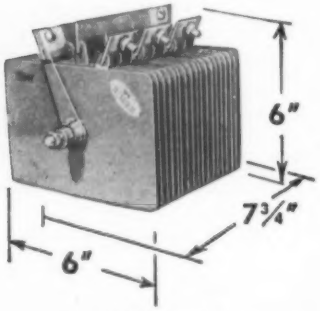
with a Generating System that charges like this!



ALTERNATOR
WEIGHT . . . . . 31 Pounds
RATING . . 14 Volts—100 Amperes



3-ELEMENT VOLTAGE REGULATOR
WEIGHT . . . . . 4¾ Pounds
RATING . . 14 Volts—100 Amperes



RECTIFIER
WEIGHT . . . . . 7 Pounds
RATING . . 14 Volts—100 Amperes

Similar 3-unit system available for 6-volt service. SYSTEM WEIGHT: 41 Pounds. RATING 60 Amperes, 420 Watts

FOR THE BEST PERFORMANCE MAKE YOURS A COMPLETE LEECE-NEVILLE STARTING AND GENERATING SYSTEM—INSTALL A LEECE-NEVILLE CRANKING MOTOR AND SWITCHES FOR DEPENDABLE STARTING

50 AMPERES AT ZERO MILES PER HOUR
—100 AMPERES AT ALL DRIVING SPEEDS

GREATER OUTPUT OF THIS 12-VOLT A-C SYSTEM PERMITS THE UNLIMITED USE OF ACCESSORIES EVEN WHEN FIRE EQUIPMENT IS STANDING STILL

● Provide suitable drive ratio and this new 12-volt Leece-Neville generating system can deliver 50 amperes (potential 100) at *zero* miles per hour and 100 amperes at all driving speeds, This means you can operate all kinds of electrical accessories from a battery. And operate them without restraint even when a vehicle is standing still with engine at slowest speed!

Alternator of system won't burn out at top speed because it has no commutator with commutating brushes or no rotating armature windings, as do D-C generators. Entire system weighs *60% less* than D-C equipment of comparable rating—occupies less space—requires less support—*costs less.* For safety's sake, the greater low-speed output of this unusual generating system is needed on many types of fire-fighting equipment. See your nearest Leece-Neville Service Station or write us direct for the whole story. *The Leece-Neville Company, Cleveland 14, Ohio.*

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Pioneer and STILL Quality Leader

CRANKING MOTORS • GENERATORS • VOLTAGE REGULATORS • SWITCHES

THE Indian has always symbolized alertness, speed and ability to go into action fast. With INDIAN FIRE PUMPS you, too, can be ready for all types of fire fighting. Make INDIANS your chief means of fire protection.

PATENTED

Properly formulated wetting agents may be effectively used in INDIAN FIRE PUMPS, including galvanized steel tanks now coated on the inside with asphaltic base paint.

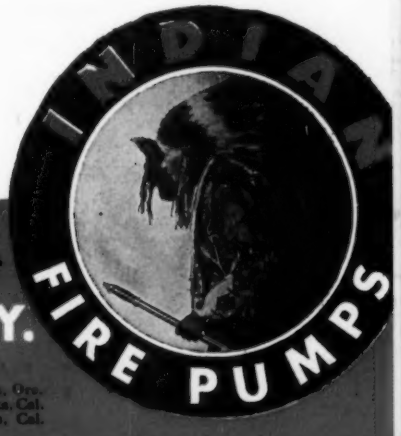
Be ready to go when fire strikes—USE

INDIAN FIRE PUMPS

A crew of fire fighters equipped with INDIAN FIRE PUMPS rests after extinguishing a large fire.

Every INDIAN FIRE PUMP is a one man fire department in itself. Slung on the back, it goes into action with lightning speed. Any water supply serves for quickly filling the 5 gal. tank. Easy pumping throws 30 to 50 ft. stream or nozzle adjusts to spray or fog mist.

Send for Catalog and Price List



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...and DRENCH MEANS PENETRATION *where you need it most.* Tried and proven under actual forest fire conditions, DRENCH is the wetting agent that will give you complete penetration and saturation of dangerous leaf mold, ground duff and char.

DRENCH gives faster extinguishment of the fire line and eliminates patrolling, rewetting and trenching.

DRENCH is a properly formulated wetting agent, readily soluble in all naturally occurring water supplies over a wide temperature range and does not require special nozzle equipment.

DRENCH saves *time, money* and *man hours* in the complete extinguishment of forest fires. Where penetration really counts, use DRENCH.

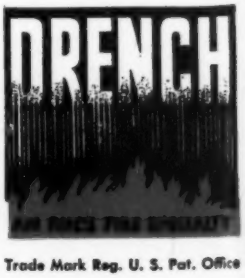
DRENCH is the *tried* and *proven* wetting agent.

ARNOLD-HOFFMAN & CO., INC.

Fire Specialties Division

PROVIDENCE, R. I.

ESTABLISHED IN 1815 • PLANTS AT DIGHTON, MASS. AND CHARLOTTE, N. C.
NEW YORK • BOSTON • PHILADELPHIA • CHARLOTTE



Trade Mark Reg. U. S. Pat. Office

ALL WE HAVE CLAIMED . . . AND MORE

Fast action, minimum water damage, and complete extinguishment on all types of fires—

All these claims and more have been proved by hundreds of FMC High-Pressure Fog Fire Fighters now in use.

Nothing else like it

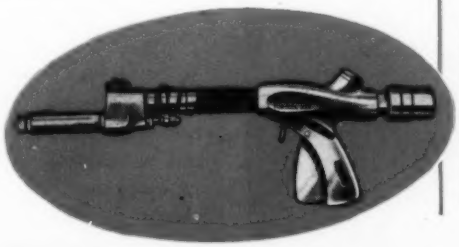
Users of FMC units tell us there's nothing else like it! You arrive at the fire ready to go to work.

FMC High-Pressure blasts, cools and smothers flame—and FMC units do the job with much less water than other systems.

That means you reduce fire losses two ways: *First,* by quick extinguishment; *Second,* by cutting down water damage.

You owe it to the people you protect to investigate FMC High-Pressure for your department. Get the facts.

UNDERWRITERS' LABORATORIES APPROVED



ONE MAN CAN HANDLE the patented Bean fog fire gun. Provides every type of fog pattern—everything you need for high pressure work.

PROOF

STEVENS POINT, WISCONSIN. *"We have made 441 runs since we received our high pressure truck. During that time we have laid a line to a hydrant just 9 times in two years, to supply water to our booster tank, as our tank holds only 150 gallons."*

• • •

BRIGHTON, MICHIGAN. *"We believe that we are extinguishing fires that could not possibly be managed with other types of equipment."*

• • •

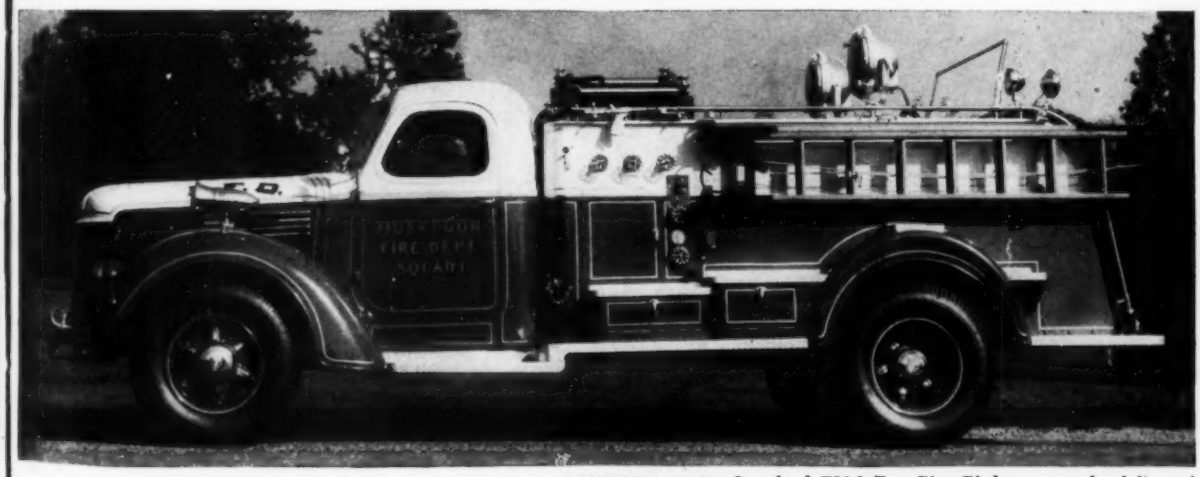
ROCK FALLS, ILLINOIS. *"High pressure used on 64 fires for a loss of $4,975.00."*

• • •

REDFORD TOWNSHIP, MICHIGAN. *"Forty-eight fires in 1947 to date. All were extinguished with high pressure."*

• • •

KENT COUNTY, MICHIGAN. *"All types of fires—720 fire runs—recently added another Bean High Pressure truck, making six Bean trucks in all."*



MUSKEGON, MICH. *Standard FMC Fog Fire Fighter recently delivered to Muskegon, Mich. Carries its own water supply—provides two guns of 30 gallons each—850 lbs. pump pressure—complete in every respect.*

FMC *Original* HIGH-PRESSURE FOG FIRE FIGHTER

CAN BE MOUNTED ON MOST STANDARD TRUCK CHASSIS

FOOD MACHINERY CORPORATION

JOHN BEAN MFG. CO., DEPT. 126, LANSING 4, MICH. • BEAN-CUTLER DIVISION, 409 JULIAN ST., SAN JOSE, CALIF.

BUILDERS OF BEAN HIGH-PRESSURE PUMPS FOR OVER 60 YEARS

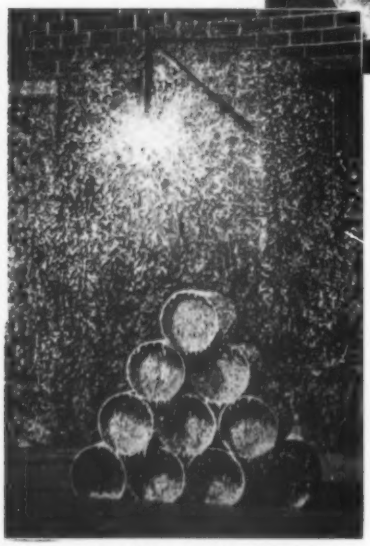
AER-O-FOAM
...ON-THE-SPOT FIRE PROTECTION

An outdoor demonstration shows the effectiveness of National's Overhead Spray Deflector.

NATIONAL FOAM SYSTEM'S Overhead Spray Deflector provides an *on-the-spot protector* from dangerous fires. These Deflectors can be installed, at low cost, wherever needed in shops and hangars. No openings need be closed . . . inspection and recharging are simple . . . maintenance is negligible.

These Deflectors, operated automatically, semi-automatically, or manually, spray Aer-O-Foam directly on the fire. Aer-O-Foam flows quickly . . . clings fast . . . forms a thick, tough blanket, smothering the toughest fires. It insulates threatened areas . . . prevents flashbacks. It is *non-corrosive* . . . will not damage machinery . . . can be cleaned off equipment or building surfaces.

National Foam manufactures chemical as well as mechanical foam (Aer-O-Foam) and the equipment for applying them. Let us know your problem . . . we will analyze it . . . suggest specific measures for protection of such fire risks as dip tanks, spray booths, paint shops.



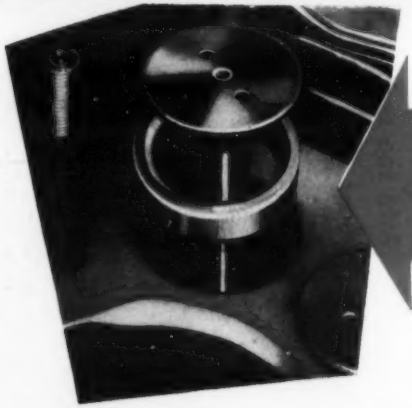
Within seconds, the Deflector spreads a smothering blanket of Aer-O-Foam over the fire.

Aer-O-Foam is sealed in containers, easily handled by one man.

NATIONAL FOAM SYSTEM, INC.

Specializing in Foam Fire Protection

Packard Building, Philadelphia 2, Pa.



MACK INSERTS STAY PUT!

• **One more reason** why Mack fire apparatus are renowned for trouble-free performance.

Technically speaking, Mack *Permafit* exhaust valve seat inserts stay put because of their unique design and construction. Faced with Stellite and copper plated, these inserts have exceptional depth, are shrink-fitted into their pockets, and – most important of all – they are made of Mack's exclusive Niferrite alloy.

To fire department officials, this means more dependable performance and lower maintenance costs. Inserts retain a permanently firm fit, and have unequaled resistance to wear. Valve life is prolonged, with less need for grinding. Engines maintain peak performance longer – apparatus spends less time "out of service".

Such painstaking attention to detail helps to indicate why over 1,000 departments rely on Mack fire apparatus. You get greater performance *out* of Macks because we build greater performance *into* them.

Guarding the heart of mid-town Manhattan, Engine 65 is one of twenty Mack Type 85 750-gallon pumpers recently delivered to the Fire Department of the City of New York.

TRIPLE COMBINATION PUMPERS — 500 TO 1250 GALLONS . . . SQUAD WAGONS . . . CITY SERVICE AND QUADRUPLE COMBINATION LADDER TRUCKS

Factory branches for parts and service in all principal cities. In Canada, Mack Trucks of Canada, Ltd.

Mack FIRE APPARATUS 5281

Fire Apparatus Division, Mack Manufacturing Corporation, Long Island City 1, N. Y.

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Protective Clothing
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Here's Protection and Comfort in Your Hazardous Work of Safeguarding Life and Property Against FIRE!

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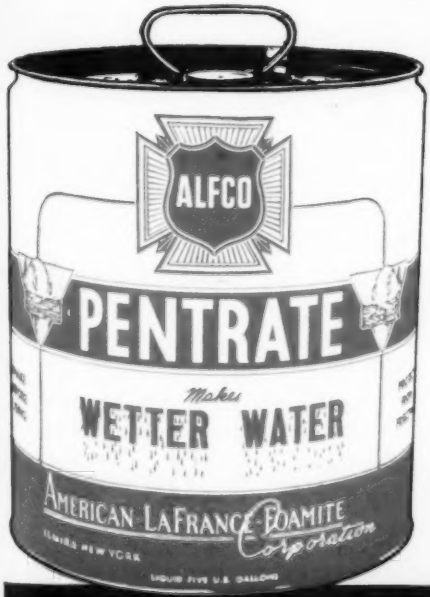

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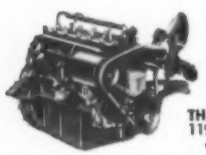

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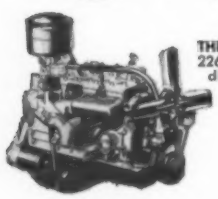

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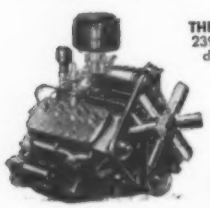

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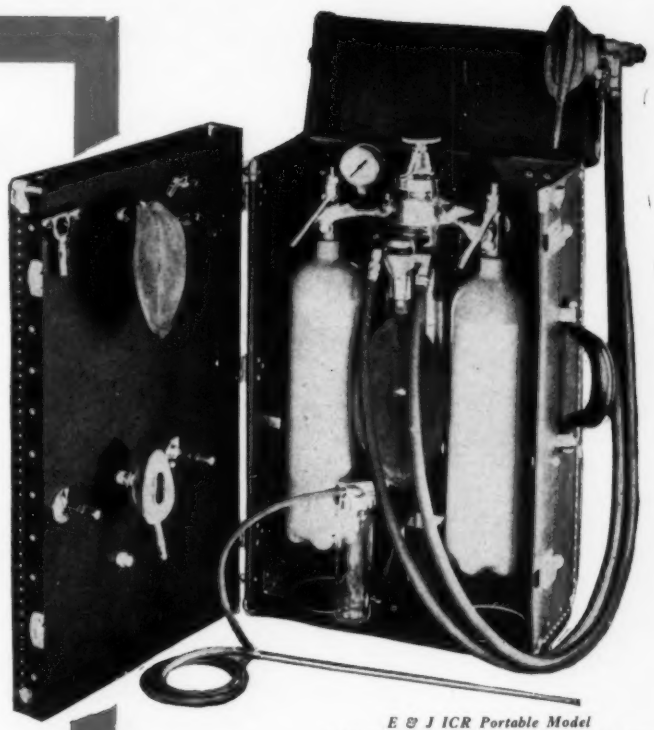

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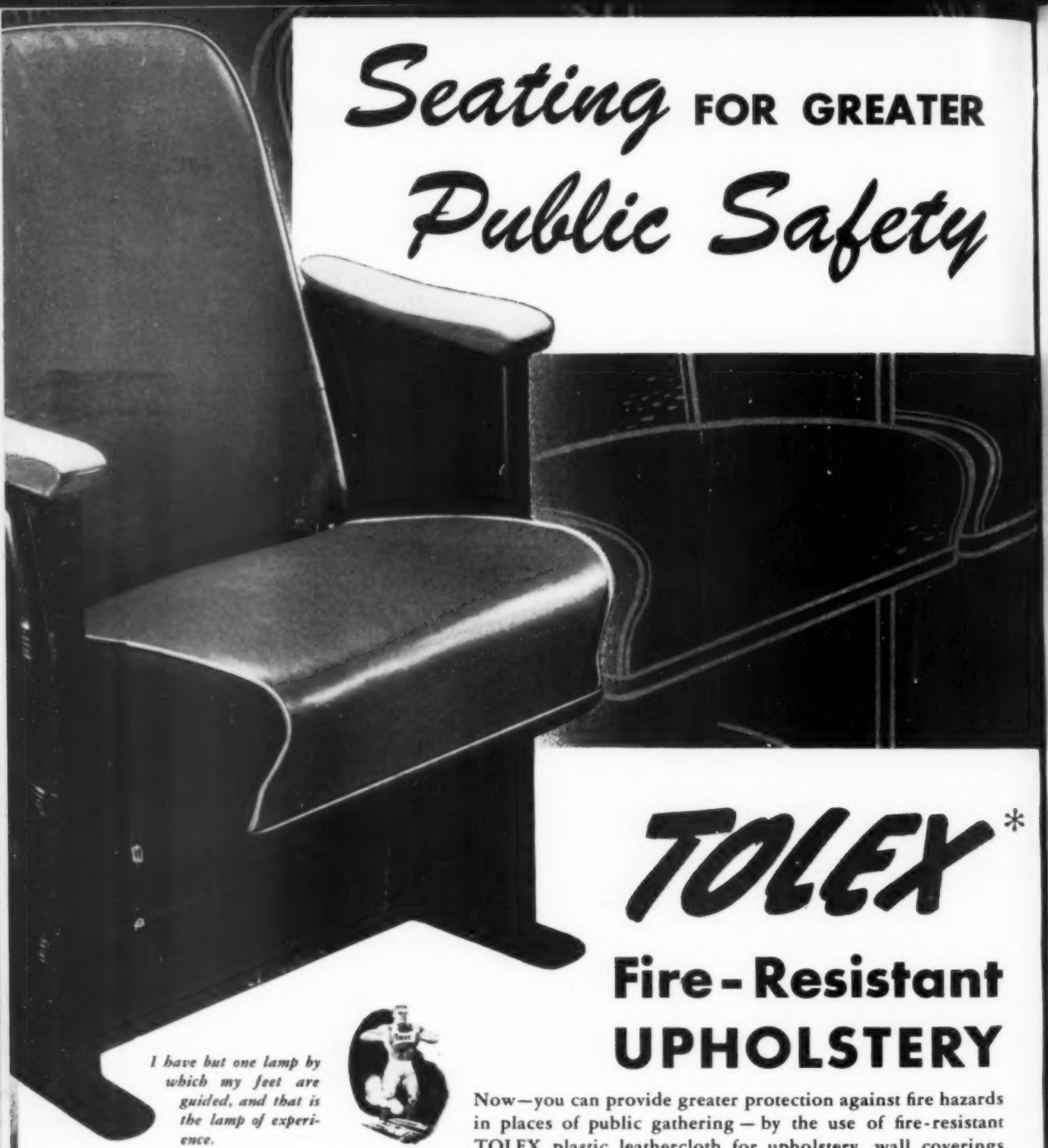

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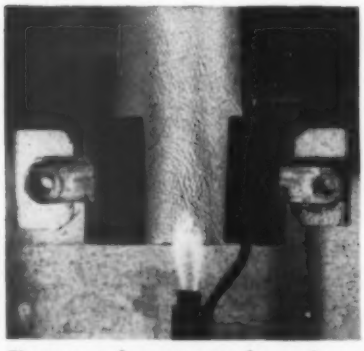

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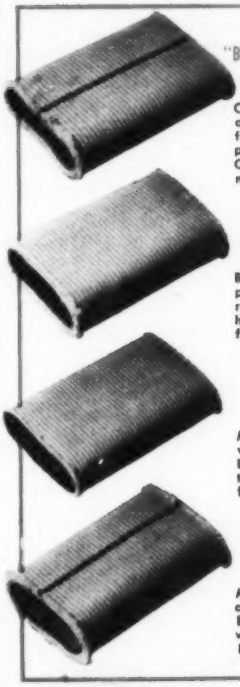

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FIRE ENGINEERING

OCTOBER, 1947 VOL. 100, NO. 10

With the Editor

The Combs Bill Congressman J. M. Combs of Texas introduced in Congress a Bill "to provide technical research assistance to fire fighting services of the Nation by the establishment of a Federal research agency for the determination of the explosion and fire hazards of chemicals, fertilizers and agricultural materials, explosives, gases, dusts, and similar flammable and explosive materials endangering life and property, and for the development of effective safety measures for the prevention of explosions and fires in chemical, agricultural and other industries, and shipping areas where flammable and explosive materials are being handled in shipping and transportation."

The Bill would further "authorize the President to cooperate with state agencies and institutions, counties, cities, business organizations, universities, technical and scientific societies in the establishment of research and service programs and to promote full cooperation among Federal and State Agencies, manufacturers, industrial organizations, labor; fire services and the public in research on fire and explosion prevention."

While complimenting Congressman Combs for his desire to speed the processes of fire prevention and fire protection (altogether too many of our lawmakers know little about the nation's waste from fire and display less desire to do anything about it) FIRE ENGINEERING nevertheless believes that even if this Bill passed both Houses—which is doubtful—it would not work in effect and in practice.

The reason why we believe the Congressman's Bill would not work can be given in just two words: "Governmental Agency." Anyone familiar with the plans, politics and procedures of governmental agencies in general and who can relate their mysteries and intricacies to the vast and varied problems of fire prevention and control will know the hopelessness of the task.

The trouble is that there are already too many government agencies dabbling in this subject. If Congressman Combs doubts this, let him check the various agencies which are at present doing work in this line. Besides the Department of Agriculture, of which he speaks, and which, under Dr. Price, has done some excellent work, others which have conducted investigations and research are: Bureau of Mines; Department of the Interior; Interstate Commerce Commission; U. S. Navy (Naval Research Laboratories); U. S. Engineer Corps; Army Air Forces; Department of Commerce; Department of Labor; Federal Housing Administration; Civil Aeronautics Adminstration and Civil Aeronautics Board. The Federal Communications Commission has also been concerned with fire losses.

Then there are quasi-government agencies, such as the National Bureau of Standards. Finally, there is the Federal Fire Council, an agency set up to represent all government agencies in matters of fire protection, but only of government property. Its work, which is done on a sort of committee basis, however excellent, is little known to the fire service.

We doubt if Congressman Combs himself is sanguine enough to believe he could create a single government agency that could take over all the fire prevention and protection research and investigation, the creation of plans, programs and policies of all these varied agencies. There are just too many bureaus, and too much bureaucracy, in our existing governmental set-up.

We do not depreciate Federal cooperation and aid, albeit this generally comes "too little and too late" or has too many strings attached, but we are skeptical of government supervision and regimentation.

What we would *like* to see is the right kind of cooperation furnished the existing private and semi-private agencies and organizations that are now doing such an excellent job in furthering the control of fire waste, with practically no support from Washington. To mention one such entity—the Underwriters Laboratories. We should like to see the scientific laboratories of our colleges and universities give the same sort of attention to our problem, with government endorsement and support, that they are today giving to the study and developing of atomic energy. In short, we would prefer to see Federal endowed aid to *existing agencies,* both in government and in industrial and educational fields, using the existing facilities of research and education, than to attempt to set up more agencies which, however well conceived, would be far removed from the fire service and would always be subject to the influence of governmental politics, patronage and persuasion.

Fred Sheppard

Another Costly Pier Fire Taxes New York Fire Fighters

Fire Department Handicapped by City's Failure to Learn Lessons of Cunard and Other Pier Fires; Result: Millions Property Loss and Injuries to Many

By ROI B. WOOLLEY

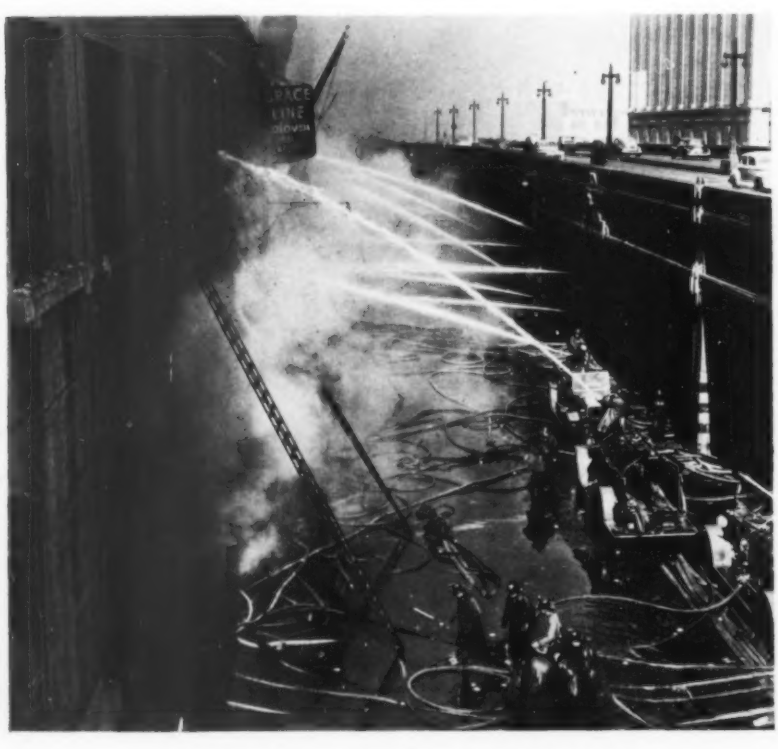
Editor's Note: This account of what New York Fire Department officials describe as the most costly pier fire in the city's history, the total destruction of the Grace Line Pier 57, North River, coming as it did only a few days before Fire Prevention Week and topping off a fifteen-year record of woeful waste in the burning of New York's waterside facilities, poses the pertinent question: how much longer must this deplorable condition persist?

As is pointed out in the conclusion of this article, even before the Cunard Pier holocaust of 1932, officials of the National Board of Fire Underwriters and the New York Fire Department had issued warnings of the fire hazards in the pier classification, prophesied the disasters that eventuated and offered definite recommendations for their prevention.

We do not have the total loss figures for pier and wharf fires in metropolitan New York for the past fifteen years but it must be a staggering sum. The Cunard fire (Pier 54) of 1932 and the St. George Terminal fire of 1946 together caused property loss of $4,000,000 —not to speak of the inconvenience to the public — and the wear-and-tear on the fire department. Many additional destructive waterfront fires multiply that figure many times.

The City of New York has not erected a new pier of any proportions in over a decade. Meanwhile the burned-out "monuments to indifference, and inaction" in the form of wrecked wharves and piers dot the waterside in steadily increasing numbers.

It is the considered opinion of the editors of this journal that the entire problem could easily and quickly be solved — and at a reasonable cost, measured by today's replacement values, if the city administration would place the entire responsibility for the safeguarding all its piers and wharves from fire—in the hands of the New York Fire Department. That organization, working with the New York Board of Fire Underwriters (which is perhaps the best informed private agency on pier fires to be found in the country) could, if given the power and the authority, end this destructive situation for all time.



Firemen Fight to Control Pier Fire from Land Side

Street operations, after fire fighters had been withdrawn from bulkhead building facing West Side Highway and Eleventh Avenue. This section collapsed on Wednesday morning.

PIER 57 was built by the city at a cost of $1,200,000 and was completed in 1907. It has been used by the Grace Line since 1936.

In its general construction, Pier 57 closely resembled Pier 54 which burned in May, 1942. It is located at 15th street and 11th avenue on the North River and measures approximately 825 feet in length by 125 feet width. It is separated about 250 feet from Piers 56 to the south and 58 to the north. The pier shed and bulkhead building form a "T" with the building running parallel to Eleventh avenue and Marginal street and the stem projecting into the River. The structures were of two stories and mezzanine having a height of about 48 feet to the eaves and 58 feet to lantern.

Construction of the pier shed was corrugated iron on steel frames with wood roof on streel trusses. Loading doors were wood, iron clad. The pier and bulkhead building decks (floors) were 3-inch asphalt surface on 6-inch reinforced concrete on 4-inch wood planking. The floor in the bulkhead building was pierced by two fire manholes, 60-feet on center. Decks were supported by wood girders and piles, much of the under-pinning having been creosoted. The second floor and mezzanine were "Clinton" system, of 4-inch reinforced concrete flat arches on steel I beams, spaced 6-feet on centers, on unprotected steel girders and columns.

The total area measured 109,350 square feet. The pier shed had a single area and there were small tile enclosed mezzanine floors at the river end of pier shed and in the bulkhead building. There were said to be three chutes in the outer (river side) section and two chutes in the inner section (land end) of the pier. There were also chutes in the bulkhead building. There were two elevators in the pier shed, which was divided by four fire curtains located about 150 feet apart. It is understood these did not extend below decks to mean low water level nor did they pierce the roof structure.

Two fire-breaks of 8-inch reinforced concrete extended from the deck to mean low water, cutting off the risk substructure from the substructure of adjoining Piers Nos. 58 and 56. It should be repeated: there were no subdivisions, no fire divisions or fire curtains, in the risk substructure. A further hazard was the poor protection at floor openings due to open stairs and elevator shafts and non-automatic traps at chutes.

Private Tugs Wage Losing Fight at Waterside End of Pier
Picture, taken from end of Pier 58, shows ineffective efforts of railroad tugs to prevent envelopment of Hudson River end of Pier 57 as the fire progressed.

Pier shed construction was mainly corrugated metal on wood frame structure, tile backed, with wood doors. The pier shed contained a cooper shop on the south side at the river end and a stevedore room said to contain wood lockers was also at the south side river end; a two-story wood crib was located in the same area. There were offices at the shore end, enclosed in corrugated metal on wood framing, tile backed with ordinary windows and doors. Under the stairs at the river end was a corrugated metal on wood frame structure for storage.

The mezzanine floor was enclosed in corrugated metal, tile backed with ordinary doors to balance of pier. A carpenter shop and storeroom occupied the balance of the mezzanine.

The second, or passenger floor, had corrugated metal on wood frame structure, tile backed with wood doors to balance of floor. The south side, at the river end, was occupied originally as crew sleeping quarters. Ticket offices were located in the center of the pier, enclosed in corrugated metal on wood frame. Customs offices were situated at the shore end and were of wood and glass construction. There was a cargo crib on the north side at the shore end which was wood-enclosed. The passenger waiting room at the shore end was enclosed in corrugated metal, backed by tile with ordinary windows and glass paneled doors to balance of floor.

The bulkhead building contained the boiler room at the southern extremity which communicated with the engine room on the north through glass paneled doors in a partition of 3-inch tile, cement plastered. Offices were enclosed in corrugated metal on wood frame, tile backed, with ordinary windows and doors. At the north end was a battery charging room enclosed in metal on wood frame with a metal-covered sliding door at the entrance. The engineers' storeroom in this section also was enclosed in corrugated metal on wood frame with glass paneled door at entrance. The balance of the space was occupied by a stationery store room of corrugated metal on wood frame, tile backed with ordinary glass paneled door at entrance, and a fuel oil test room of similar construction. Porters' dressing rooms were located on the mezzanine floor of this building.

On the second floor were offices; a confectionery and news stand; a record room, the latter cut off from the balance of the floor by wood partitions and wood door at entrance. There was a one-story wood structure having ordinary windows and doors, with wood partitions, used for storage purposes. The eleventh avenue wall was reinforced concrete rough plastered on the exterior.

Automobiles were permitted on the pier for loading and unloading but smoking was said to be prohibited.

Adequate Watch Service

The premises were protected by ADT compulsory tour watchman's service with seven watch stations and six manual fire alarm stations. There were six local alarm gongs located throughout the premises and the system was connected with the ADT Manhattan central station.

There was a 6-inch standpipe with thirty-five 2½-inch hose outlets supplied by 8-inch connections with the city mains. In addition, there were two steam fire pumps with 12-inch suction from the river, each of 750 GPM capacity. Ample hose was located at outlets and there were two siamese fire department connections at the shore end.

Exposures were not considered severe. There were unprotected windows on the Marginal street side. The sub-structure of Pier 57 was combustible, as were those of adjoining piers. These latter could be ignited by fire that might be conveyed by the tide on the river (actually, during much of the period of the fire, details of firemen were directed to patrol the tidal areas around the burning pier to guard against such extension). The adjoining piers were cut off by 8-inch reinforced concrete fire breaks extending from the under side of the deck to mean low water. The superstructure had 8-inch hollow tile, cement plastered walls extending from the deck through the roof, parapeted 3-feet and capped.

High and low pressure water systems provided ample water supply for fire department use, with hydrants under the express elevated highway (which parallels the front of the bulkhead on Marginal street) and across 11th avenue. Long hose stretches, however, were necessary to reach the outer ends of the pier from the shore side. The highway provided an elevation for the operation of heavy streams onto the upper areas of the bulkhead building.

Pier Partly Empty of Cargo

At the time of the fire there were no vessels moored at Pier 57. The 8,297-ton Grace Line Santa Rita was tied on the north side of Pier 58 and as the flames threatened the area, tugs towed the Santa Rita away and she was anchored near

General View of Burning Pier 57 Showing Heavy Smoke
Operations on north side of Pier 57, overlooking roof of threatened bulkhead building. Pier 58 at right. Aerial ladders were later removed. Fire believed to have started in substructure about opposite prow of fireboat Fire Fighter in foreground.

the Statue of Liberty. Twelve passengers were taken aboard her by launch next day and she departed unharmed, for Chile.

The S. S. Santa Barbara, due to dock on the 29th, was berthed at Pier 59 where smoke would least injure her cargo of coffee, cocoa and spices.

Although the extent and value of the cargo destroyed with Pier 57 is as yet undisclosed, (it is reported that shipping records were destroyed in the fire) it is known there were between 700 and 800 bales of cotton which were on the second floor at the time. This, and some miscellaneous other cargo, estimated at about 450 tons, located mainly at the land end of the pier, were lost.

I. E. Pendelton, Terminal Superintendent of the Line said "we were lucky" in that the pier was almost cleared of merchandise because two ships were loaded from the pier the day before the fire.

At 12:45 A.M. on the morning of the 29th, the Grace Line summoned twenty-four stevedores to speed the removal of cargo from Pier 58. Included were tanks of freon refrigeration gas and anhydrous ammonia which were in the path of possible extension of the fire.

Fire Fighting Operations

The fire was discovered about 7:50 P.M. by William Herman, Grace Line guard. He notified Roundsman John Mollinari who sounded an alarm from the ADT building box near the Eleventh avenue entrance of the pier.

This "Class 3" signal, as it is known in Fire Department parlance, brought Engines 3, 18 and 24; the Fireboat Harvey (E 86) from nearby Bloomfield street slip; ladders 12 and 5, and Battalion Chief John J. Broderick of the 7th Batt.

A 'full moon' tide was almost at its zenith (high tide at 9:00 P.M. September 28) a fact which complicated the early fire fighting operations.

There was not too much merchandise on the pier itself, but storage was heaviest toward the shore end, in other words where indications of the fire were most pronounced (according to Fire Commissioner Frank Quayle who arrived later on the 5th alarm, the fire apparently had its origin below the pier deck, about 150 feet from the shore end).

Contrary to some early reports, there was little smoke, and no show of flame when firemen arrived. This is attested by the fact that the ADT representative, who reported on the building alarm while the firemen were seeking to locate the fire, found so little evidence of it that he replaced the glass in the box and returned to his central office.

Meantime, hose lines had been stretched and when, some minutes after the first firemen arrived and the fire was located, the companies were ready to go to work—but faced the problem so common in fighting other pier fires in the city—how to reach the seat of the blaze which was extending through the creosote-treated wood sub-structure.

Rescue 1 and air compressor 71 were called soon after the fire was placed, and about this time Assistant Chief William Hennessy arrived and took command. He was no stranger to pier fires, having been active in the St. George Ferry Terminal fire of 1946.

It was then about 8:30 P.M. and soon after the Fireboat Duane (E. 85) from West 35th street and the North River was called, followed eighteen minutes later by the striking of Box 572. At 9:01 the second alarm was sounded.

By this time the acrid smoke had increased so in intensity that men, working with masks, were almost unable to operate cutting and pavement breaking equipment. Nor were efforts to get at the fire from the water side any more successful. Boat streams were ineffective and the fire made steady headway toward the shore and river ends of the pier.

The third alarm was sounded at 9:35 P.M. bringing the Fireboat Fire Fighter (E 57) from the Battery along with six land companies. Meanwhile, pressure had been stepped up to 150 P.S.I. on the city's high pressure system and this was advanced to 175 P.S.I. shortly after the third alarm.

From almost the discovery of the fire, the fire fighting operations closely paralleled those in the Cunard Pier battle, fought under almost identical conditions and handicaps. Men took gruelling punishment in attempting to open the concrete and asphalt deck and supporting members. Searchlights hardly penetrated the heavy, oily smoke. Stowage in some cases had to be moved to bring lines into operation or to protect merchandise from heat convection. And stubbornly the fire ate its way through the substructure, and then, into the pier itself.

The fifth alarm at 10:18 (the fourth was intentionally skipped), brought the limit of assigned help established by the department's running cards. From then on companies were special called, some to the fire ground, some to locate in fire stations left empty by the response to the fire. With the fifth alarm came Frank Murphy, Chief of Staff and Operations; Fire Commissioner Frank J. Quayle and other officials.

Brooklyn Reinforcements Called

The fourth and fifth alarms and subsequent special calls for six additional pumpers, brought heavy reinforcements, but still insufficient to confine the spreading fire, which was working into the bulkhead building and engaging the pier superstructure.

Units of the Marine Division concentrated on attempting to prevent riverward extension of the blaze; in this they were joined by a score of railroad and other tugboats. The moderate wind carried the thick smoke cloud upriver and, at times, shoreward.

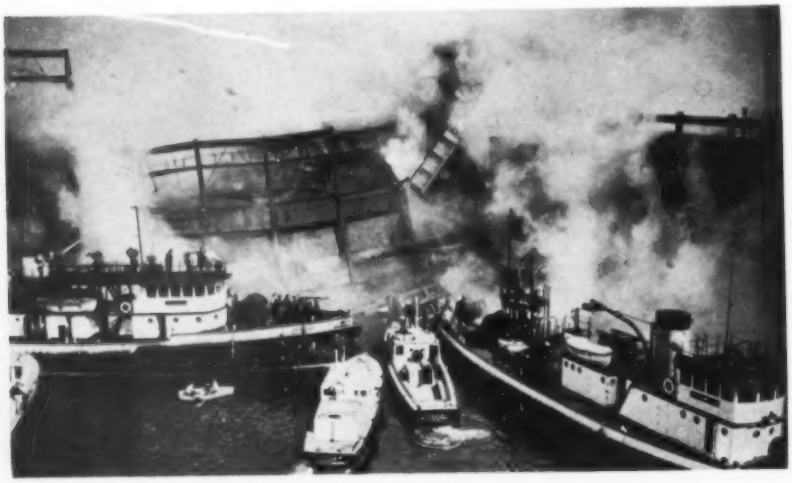
At 11:06 a seldom-used signal was employed by Chief of Staff Murphy to summon further aid from Brooklyn. Via his car radiophone he called for all companies that would normally respond on a third alarm to box 236 near the Brooklyn end of the Williamsburg Bridge, to proceed to Pier 57. This signal (66-572-77-33-236) threw ten additional companies into the struggle. A few minutes later two more Fireboats, the Strong and Mitchell, were special called, making the total of boats at work six.

By midnight the fire had full possession of the under-timbers, had worked into the superstructure, driving out all fire fighters, and threatened the bulkhead building of Pier 58 to the north and, to lesser degree, Pier 56, to the south. At about 11:30 P.M. firemen were ordered off the pier structure. At 12:15 A.M., the morning of the 29th, Commissioner Quayle announced the superstructure of Pier 57 had been destroyed and at that time 150 firemen operating in and on the Eleventh avenue side of the structure were ordered to fight the fire from outside, using heavy caliber streams from deck and ladder pipes, deluge sets and hand lines. It was necessary to cease attempts to control the flames with distributors and cellar pipes operated through openings laboriously cut in the heavy deck and floors. Heavy streams were also operated from the West Side Highway.

The fire was brought under control shortly before 2:00 A.M. the morning of the 29th. Meanwhile, firemen who had reported at their stations at 4:00 P.M. the previous day had been held on duty until 8:00 A.M. Some twenty-five men and five officers were dispatched to the fire in hose trucks from Brooklyn and Queens to provide additional manpower.

Pier Sections Collapse

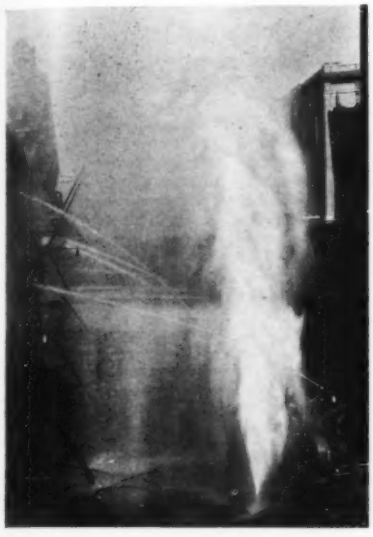
Throughout the 29th the flames steadily consumed the pier substructure



Dramatic Episode on Second Day of Grace Line Pier Fire

Firemen on bow of fireboat Fire Fighter (left) and stern of Harvey (right) with crews of Police Launch and fireboat tender Smoke, attempt to aid patrolmen who have just rescued Fireman McNulty, thrown into water in collapse of pier section a moment before. Section later sank to river bed.

after the main body of the fire had been brought under control. At 10:45 A.M. about 200 feet of the forward end of the pier collapsed with a roar, slightly injuring some firemen. This was approximately an hour after 300 feet of the central section crumpled into the river.



Not Water-Fog But a Reasonable Facsimile Thereof
Ruptured high pressure hose line plays "Old Faithful," shooting spray sixty feet skyward, during street operations.

The cave-in of these two sections left only about 100 feet of the structure standing erect out in the river, and this, too, ultimately dropped.

The crash of the second section caught some units of the Marine Division close by and the terrific swell kicked up by the cave-in threw members of the heaving boats off their feet, one officer being painfully injured. Fireman Peter McNulty of the Fire Fighter was thrown into the river off a string-piece and was rescued by patrolmen from a police launch. He suffered injuries to his hip and from submersion.

No firemen were on this section of the pier itself when it collapsed but three compressors used to power pneumatic drills were lost.

Many Firemen Injured

During the night of the 28th, sixty-six firemen were injured, none very seriously. As the fire struggle wore on the casualty list grew until by noon, Wednesday, third day of operations, the total had reached 151. Twenty were reported taken to hospitals. Dr. Harry M. Archer, Deputy Fire Commissioner and chief department surgeon, set up an emergency medical station with twelve cots at the corner of Eleventh avenue and 15th street.

For the most part the firemen's injuries, none marked as dangerous, were from smoke poisoning and irritation, cuts, sprains, bruises and submersion. A number of men fell into the water from rafts and string-pieces. Most of these returned to work after being treated at the scene. One of the near-drowned was Lieut. Augustine Halley of Engine 33 who fell from a raft and was pinned, half-submerged between his own and another raft until he was rescued by other firemen. He returned to duty after treatment.

During the earlier stages when men were operating inside the pier structure, in the choking smoke, falls were frequent and at times it was necessary for the men to operate hose lines in relays.

Cause May Never Be Known

Although investigation into the origin of the fire is still under way at this writing, directed by Deputy Chief Fire Marshal Martin Scott, it is reported the cause is undetermined. According to Fire Commissioner Quayle, the origin was "not suspicious, but undoubtedly due to carelessness." The investigation centers around the unconfirmed report that live coals were dropped from a tugboat onto oil-covered water. The Commissioner added that efforts were being made to locate the captains of three lighters that were moved from the pier before and during the fire.

According to the Commissioner's statement: "The investigation of this fire reveals that it had its origin under the pier among creosote-covered pilings, about sixty yards from the off-shore end of the pier; that, while the cause of the fire as yet has not been determined, all efforts are being concentrated on learning the identity of a tugboat which removed a lighter from the south side of the pier near where the fire had its origin, within an hour of the discovery of the fire . . ."

Police harbor launches aided materially in patrolling the waters to guard against extension of the fire and to move fire fighting personnel. Their crews aided in rescuing firemen who had fallen into the water.

Eleventh avenue, under the Highway, was clogged with fire apparatus from Fourteenth to Seventeenth streets. Many of the forty and more new pumpers recently added to the department received their baptismal workouts.

Although no apparatus was operated on Pier 57, pumpers were drafted from adjoining piers to aid land companies. As rapidly as possible, spare pumpers were used to take over the "wetting down," but most of that task was left to the fireboats because of the difficulty of reaching the smouldering fires in the pier wreckage from the land end.

The fire resulted in the mobilization of one of the largest forces of men and equipment in the history of the Fire Department. The alarms and Departmental response was as follows:

8:09 P.M. Sunday, Sept. 28, ADT manual box 3-572-3, located at the shore end of Pier 57, was pulled. This brought three pumpers, two ladders and Chief Broderick, 7th Batt.

8:26 P.M. Chief Broderick special called Rescue 1 and a minute later he called air compressor No. 71 (Signal 9-572-71) Chief Carlen, 2nd Div. soon arrived and, on notification that "all hands" were engaged, Asst. Chief William Hennessy, who was in charge of the Department, rolled to the scene.

8:35 P.M. Fireboat Duane (Eng. 85, Act. Chief Donnelly) was special called.

8:53 P.M. Street box 572 (16th and Eleventh) was pulled, bringing one more pumper and Act. Chief Gowdy, 6th Batt.

9:01 P.M. Asst. Chief Hennessy ordered a second alarm, bringing six pumpers, one ladder, water tower 2 and searchlight 21. At 9:20 a second air compressor was special called.

9:32 P.M. High pressure system raised from 125 to 150 P.S.I.

9:35 P.M. Third alarm, bringing five pumpers, Fireboat "Fire Fighter" (E 57) one ladder; fuel truck 12; ambulance 1 with Dr. Harry Archer and Dr. Schein; Act. Chief Robinson, 3rd Batt.; Field Kitchen 94; Supervising Engineer Irwin; Deputy Chief Fire Marshal Scott and others of Chief Fire Marshal Brophy's staff.

9:38 P.M. Pressure on H.P. system raised to 175 P.S.I.

10:08 P.M. Fifth alarm (the 4th alarm was skipped). With six special calls for pumpers which followed, this brought thirteen pumpers; Chief Mills, 9th Batt.; Frank Murphy, Chief of Staff and Operations; Fire Commissioner Frank Quayle; Chief Arthur Jones, in charge of appara-

(*Continued on page 740*)

River End of Pier Collapses on Morning of September 29th
Looking north from Pier 56 as waterside end of Pier 57 settles to bottom. Near-high tide shows small clearance between water and sub-structure. Collapse caused heavy swells.

Why Berlin Suffered Heavy Fire Losses from Bombing

Not Prepared for Combatting Multiple Blazes; Building Construction Defective; Fire Fighting Facilities Inadequate

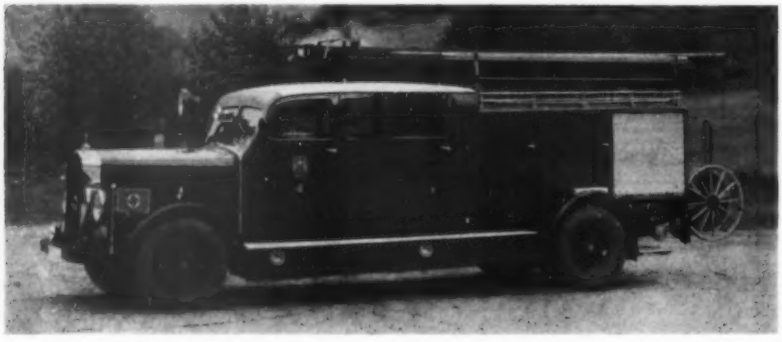
By BERNHARD PEILL

Mr. Peill, who has been a correspondent for Fire Engineering for many years, was present in Berlin during many air raids of World War II. Having previously served in the German fire fighting forces, he was particularly well fitted to make observations of both the effectiveness of the fire raids and the efforts of the fire forces to control the conflagrations started thereby.

In this article, Mr. Peill reviews his experiences at a number of big German wartime fires, and cites deficiencies in fire prevention and fight fighting which materially increased fire losses.

—EDITOR.

AT the end of January, 1944, I was sent from Ostrau to Berlin to study fire losses and fire fighting methods during air raids. At that time, Berlin already had suffered, since the beginning of the Summer of 1943, a considerable number of air raids with great damage and high losses, especially by conflagrations. Extended districts in the northern, northwestern, western and southwestern parts of the city and adjacent suburbs had been either entirely destroyed or partly damaged.



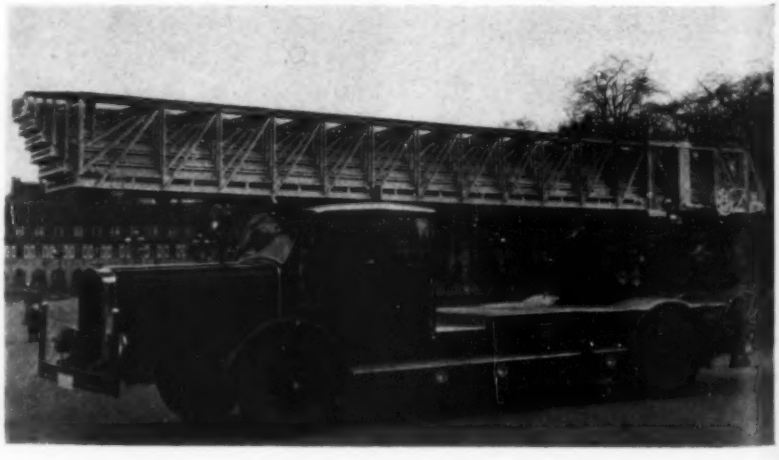
Typical German Diesel Powered Pumping Engine of 400 Gallon Capacity with Closed Body.

Before continuing my personal impressions, I must tell you that before the beginning of this war, fire prevention had not been in the best condition within the capital of the Reich. While, for instance, in Vienna, the attics of tenements and apartments were separated from the upper floors by heavy boards and beams covered with bricks, private houses and pub'ic buildings of Berlin did not show this kind of protection so that even during peacetime most of the Berlin roof and attic fires used to spread to upper floors. The same thing existed as to the ceilings and covers between the single tenement and apartment floors.

In Vienna, the strongest beams, boards, and in public buildings, often concrete protection, were provided, while in Berlin the whole interior of private houses and public buildings was almost a "box of matches," including stairs and staircases. Even during peacetime, staircase fires in Berlin frequently brought life risk and danger to tenants and inhabitants. Since the First World War, architects in Berlin had begun to vio ate the law ordering that fire walls must be higher than the roof, pretending that lower fire walls would be more fashionable. And even the authorities did not succeed in preventing these dangerous violations. In Vienna, laws of the former Austrian state and orders of local authorities always had prevented the erection and installation of workshops and warehouses among tenement and apartment blocks. The usual composition of Berlin dwelling blocks was as follows: on the street side, a five or six-floor tenement or apartment building, the rear parts of which contained—only separated by narrow staircases or open elevator shafts—apartments, lodge rooms or other dwellings together with workshops of carpenters, cabinetmakers, radio repair shops, small factories and laboratories, etc.

The courts and yards of these combination dwelling and working blocks often were dark and narrow, with one court often situated behind the other (the most curious block of this kind on the Ackerstrasse of northern Berlin having not less than ten small and narrow courts, so that the Berlin Fire Brigade early had been forced to introduce special hand-drawn hose reels in order to stretch lines from hydrants and steamers placed on the street across the different house doors, courts and yards to the often faraway situated location of fire).

The use of extension and aerial ladders, life nets and other rescue appliances in these narrow courts and highly crowded blocks often was extremely difficult and dangerous, standpipes and iron fire escapes only existing in those buildings which contained a more important floor industry. When I was a young fireman, I often assisted at fires in such kinds of mixed industrial and dwelling blocks, which, within a short time, had spread from the cellar to the roof or from the attic across staircases



Automatic, Power Driven, One Man Operated, 148-Foot 6-Sectional Steel Aerial with 150 HP Motor. Weighs Twelve Tons and Is Thirty-five Feet Overall.

and elevator shafts to the basement of street and court-sided buildings.

Local and foreign experts had often warned Berlin authorities of these enormous fire risks and, since 1938, it was especially the Vienna Fire Brigade which tried to convince the leaders of Berlin's Public Safety that improvements in fire protection should be introduced in order to prevent general conflagrations caused by air raids. In spite of this, Berlin architects continued until the beginning of World War II to build five and six-floor apartment houses with narrow wooden staircases, light and open attics, too low fire walls and without any kind of anti-air-raid protection, the famous Luftschutzgesetz from 1935 only being a joke for most of the housekeepers, architects and even authorities.

As to water supply facilities, additional water for fire fighting after air raids had been provided in several, but never in all parts, of the city, because there always was a considerable lack of money in the public administration even during the most flourishing periods of the Reich, at least as to expense for air raid protection and fire prevention. Besides natural rivers and lakes, artificial water pools had been planned in most parts of commercial, industrial and high value districts, residence quarters and public institutions, but it was not until the beginning of the war that bigger or smaller fire pools began to be erected, mostly by auxiliary firemen themselves. A considerable advantage for water supply was the large number of fountains and special fire wells already existing since before the war in most parts of the city and suburban districts. Last but not least, fire fighting at the time of air raids themselves had been organized in an extraordinarily successful way. Instead of training the Luftschutzewerte (ARR wardens) and Selbstschutzkraffe (house fire fighter squads) by regular members of the professional or volunteer fire brigade, training schools were organized and erected by the Reichsluftschutzbund, most of the members and instructors of which never had seen a fire engine or a hose line before.

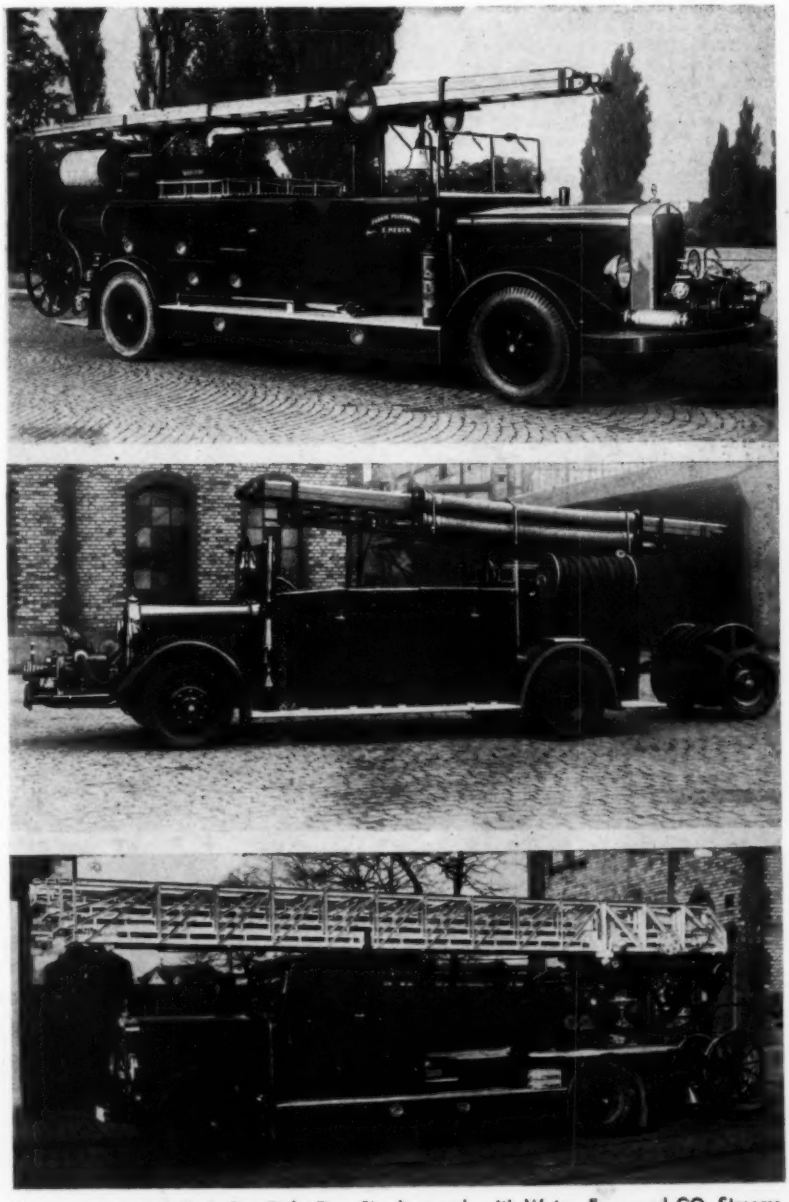
It was well known within fire brigade and firemanic circles that most of the ARR wardens were not even able to stretch a small handline or to organize a bucket brigade and that they never had seen, except at especially prepared training school fires, real fires nor practical fire fighting, etc.

As to auxiliary firemen, they were fairly well equipped, well trained and well organized, but soon after the beginning of the war, the younger and best trained auxiliary firemen were sent from Berlin to military fire departments of the airforce, or to one of the different Feuerschutzpolizei-Regimenter which were on duty in the occupied countries during the war, so that Berlin's fire fighting had to remain in the hands of old and unfit men.

As to fire apparatus, different standard types of heavy and light pumpers, trailer and portable pumps, hose wagons and hose trailers had been prepared during the years before the outbreak of this war, the Berlin Fire Brigade having introduced a considerable number of new appliances mostly for use by auxiliary firemen. But sorry enough, construction and equipment of the pumpers had not been chosen following practical experiences, but in most cases only following technical tests and "green table" conferences, so that the aspect of such equipment often was horrible for fire fighting veterans. Lack of pumpers with sufficient booster tanks, turret pipes upon clumsy two-wheeled hose trailers and entirely inadequate position of ladders upon apparatus constantly signified the considerable difficulties which might occur as soon as real air raids would oblige firemen to fight serious blazes.

As to small fire equipment, government authorities had concluded to replace the old-fashioned, but always most practical Rubelspritze (hand fire pump with own water tank containing 2-3 gallons) by the standard AAR handpump (L. S. Hanspritze) without water tank of its own and first made of copper parts and later with iron, lead and finally, plastic, so that if such a pump only fell from a stairs or a low roof, it would be broken to pieces before it did any extinguishing. Besides this, most Berlin houses had no fire buckets. Most of the hand pumps had not enough hose, had inadequate nozzles, and auxiliary water tanks were not found in all public buildings of the city. Besides this, there was among the AAR forces a general lack of adequate helmets, clothes, lamps and flashlights, hooks and axes, protective covers and all sorts of other important appliances absolutely needed for successful fire fighting under the hardest conditions of air raids.

As to the fire alarm system, the first air raid alarms (not real air raids) at the beginning of the war caused among local authorities a considerable shock



Upper: Apparatus Which Can Fight Fires Simultaneously with Water, Foam and CO_2 Streams. Center: Apparatus for German Auxiliaries. Besides Pump in Front, It Is Equipped with a Portable Motor Pump Carried at the Rear. Lower: 150-Foot Steel Aerial Ladder.

and panic, for all Berlin fire alarm boxes were out of commission during the first weeks of the war. Later the authorities succeeded in reopening the alarm system by the time real air raids began to occur. An organization of belltowers and lookouts, bicycle and motorcycle fire messengers (mostly Hitler Youth organization members) had been formed to replace the alarm system, but as it was entirely forbidden to the public to turn in an alarm of fire during or shortly after an air raid, the whole auxiliary fire alarm organization was doomed from its beginning.

After having visited different factories and plants which had been partly destroyed by fires during air raids, after having seen many of the most badly burned districts of the city and suburban districts, and after having gotten important information about fire fighting experiences during air raids from different fire brigade officers, the alarm siren blew the first time that I was with my relatives in a western suburban district. When the alarm was over, I could observe from the attic windows several fires in the neighborhood. As it was only a residential section without congestion, the danger of a general conflagration was not great. After having seen some smaller bungalows on fire, I arrived on a public square where a big crowd was watching a two-story apartment house, a modern brick building, the attic and roof of which were entirely on fire. As the water system of this district still was functioning, the local volunteer fire brigade had connected its portable motor pump to a hydrant, but the two streams from the pumper were poured only from outside over the burning roof. When I arrived at the door of the house, the entrance and the staircase were crowded with a great number of policemen, soldiers, auxiliary firemen, AAR wardens and civilians, most of whom endeavored to rescue all sorts of furniture. The entrance was entirely blocked by a large piano which was to be carried out of the first floor to the street. Having climbed upstairs, I found the entrance to the attic ablaze and the fire ready to spread upon the staircase. Among the flames, I saw a good, old-fashioned hand pump, with burned hose, and bucket which had been abandoned by its fire fighters. As there still was water enough in the first floor bathroom, I succeeded in organizing, together with some other men, a bucket brigade to the attic and got one of the hose lines from the pumper and stretched it to the burning attic. The fire was brought under control within half an hour. Allow me to mention that there was trouble enough, for in one instance a furious soldier madly worked to rescue a cupboard by beating it to pieces with an ax.

After leaving this not so badly damaged suburban district, I moved to the railroad station where I learned that the air raid had only set fire to the southeastern parts of the Berlin industrial section. As it was not long before the suburban railroad and bus systems began to work, I was able to arrive in time to see the various factories and plants around the former aerodrome of Johannistahl ablaze.

The most important fire had broken out in the motion picture studios of the Tobis Ltd., besides the UFA, the most important German moving picture enterprise at that time. The office building, a five-story fireproof concrete and iron structure, had been wrecked by bombs but was not afire. As to the studios themselves, they were entirely ablaze, the fire threatening to spread to different neighboring plants, barracks and dwellings. Because the private plant fire brigade was out of commission due to the air raid, the Berlin Fire Brigade had sent about twenty pumpers, hose wagons and aerial ladders which tried to fight the blaze, taking most of the water supply from the Teltow canal which was not far from the fire.

Before this fire could be brought under control, I hurried to cross the river Spree where a big conflagration had seared the cable factories of the AEG, Oberschoneweide, together with adjacent property. To get there, I was forced to cross entirely destroyed streets in which plaster, trees, trolley masts, underground cables and tubes, roof parts and other house debris, made passage almost impossible. Nobody was to be found among this general destruction, all people having fled to AAR shelters and adjacent quarters. The gas escaping out of broken pipes was burning and setting fire to smaller frame dwellings, putting me in mind of the American moving picture "San Francisco 1906," which had been shown in Berlin theatres about 1934. In addition, there were small parks and forests on fire, but within the whole district, no fire fighters were to be seen.

When I arrived near the AEG plant, the fire already had swallowed most of the workshops and office buildings where about thirty Berlin Fire Brigade pumpers were engaged in a losing fight to extinguish the fire. The chief office building, a so-called fireproof concrete structure, was burning from the basement to the seventh floor like a single torch. As the fire within this building was so dangerous that hose lines had entirely been drawn back from the interior, this blaze was fought from the outside by a large turret pipe upon a two-wheeled hose trailer, the turret pipe getting water from two big pumpers. As the private and public water systems of the district were out of order, water was pumped from the nearby river Spree to the pumpers working at the fire.

After having seen the misery of bombed-out inhabitants of burning tenements where only weak fire fighting forces with portable motor pumps were on duty, I returned early in the morning, because the following day I was to look at the parts of the city between Alexanderplatz and Wiessensee where the same air raid had wrecked a number of buildings, but without setting them on fire. On Saturday I had intended to leave Berlin, but when early in the morning the sirens began to blow, I guessed that I would not be able to get out of the city. When the alarm was over, I climbed to the attic of the house where I was stopping in order to look for fires, because from the street of this far away suburban district, the whole sky over Berlin was lighted by a number of large fires. As it was hopeless to wait until the railroad or bus system would function, I lost no time but started off on foot in the direction of Lichterfelde. From a wide field, I was able to look at a considerable part of greater Berlin which seemed to be entirely on fire.

When I arrived at the first bungalow on fire, I found some AAR wardens fighting the blaze in the first floor and the attic with hand pumps and buckets, while the greater part of these volunteer firemen, although they had helmets and

(*Continued on page* 743)

German 525 G. P. M. Front Mounted Pump at 125 P. S. I. Pressure.

TWENTY DIE IN PITTSBURGH EXCURSION STEAMER FIRE

Explosions Precede Fire That Destroys S.S. "Island Queen" With Loss of $1,000,000

A Staff Report

PITTSBURGH experienced its worst waterside disaster Wednesday, September 9, when explosions and fire destroyed the excursion steamer Island Queen, moored in the Monongahela River at the foot of Wood street. Twenty persons were dead or missing and scores were injured by the blast, which caused property loss estimated at over $1,000,000.

The Island Queen, said to be the largest inland excursion vessel in America, was the second craft to bear the same name; she first went into service in 1925, three years after her namesake, a wooden ship, had burned. The new Queen was built to carry 4,000 persons including a crew of ninety and a sixteen piece orchestra. She measured 286 by 85 feet; had five decks and burned oil for fuel, with a reported fuel tank capacity of 35,000 gallons. The boat was owned and operated by Coney Island, Inc., of Cincinnati, which was her home port. She traveled to Pittsburgh to fill a series of river excursions, the first of which was to have been held the preceding Saturday but which was postponed due to docking difficulties. On the night before the tragedy, the ship took a near-capacity crowd down the River to the Elsworth Dam. On this trip there was some trouble and eight persons were said to have been arrested. It is reported that another excursion crowd had been booked for the day of the disaster.

There is general agreement that had the explosion and fire occurred while the ship was crowded with excursionists the loss of life would have been frightful As it was, all casualties were members of the ship's crew about half of which was aboard at the time of the initial blast, reported to have been 1:16 P.M. At the time of the explosion, the Master, Charles N. Hall, and all of the orchestra, except its leader, Clyde Trask, were ashore and escaped serious injury.

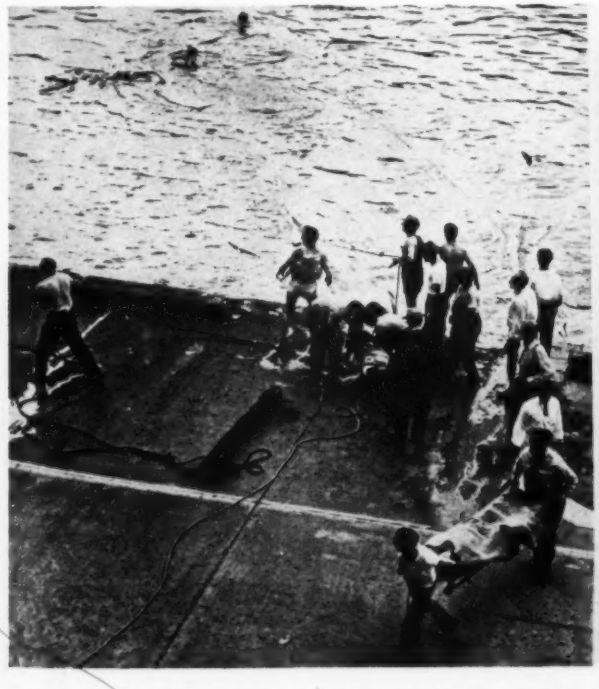
Cause Attributed to Welding Torch

Although the actual cause of the disaster may never be determined, early testimony given before the Coast Guard Board of Inquiry, set up immediately after the tragedy, suggests that a welding torch may have been responsible. The possibility that one or more of the ship's boilers might have exploded has been ruled out; they were found to be intact, although it is said that new boilers were waiting to be installed on the vessel upon her return to Cincinnati.

Survivors testified that there were two separate explosions, and that the point of origin of the first was in the fore part of the ship. Witnesses said they saw the chief engineer welding a metal stanchion shortly before the double explosion. It was said the engineer first worked on the stanchion at his workbench, then took it to a rail across the deck from the ship's oil tanks to weld it in place. It is further reported by Captain Hall that the ship's fuel storage at the time of the explosion was 25,000 gallons of crude oil, and that there was little or no spillage of the fuel. The majority of the fuel supply was carried below the water line, it is said.

Other evidence indicates that there was some painting going on at the time of the first blast and, also, there was a quantity of some combustibles forward which may have become ignited to in turn touch off the second explosion. Fire Chief William H. Davis, in charge of fire fighting operations, was told that paint remover was being used on the ship. Early testimony indicates the first explosion was the more severe. An engineer told the Board that he saw the Chief Engineer working on the stanchion and after the first explosion he, the witness, ran to check the boiler gauges, and all were normal. After he dived from the Queen, he said, there was a second and less severe blast. The chief engineer is reported among the missing.

Whatever the cause, the fire spread throughout the steel and glass enclosed ship with unaccountable speed. Within five minutes of the initial blast, it is reported the entire vessel was fully involved and those of the crew who were not killed immediately, or blown overboard or ashore by the concussion, had dived into the water. A few of the lucky ones made their escape across a river barge, located between the Queen and the shore.



Rescue Crews Pull Survivors from the Monongahela River at Pittsburgh, Pa., After Explosions Ripped the S.S. "Island Queen"

Pittsburgh Fire Fighters Wetting Down the "Island Queen" After Fire Had Been Brought Under Control

Wreckage of the S.S. "Island Queen" Resting on the Bottom of the Monongahela River at Pittsburgh, Pa., Following Explosions and Fire

Scarcely a building in the immediate vicinity of the Queen's mooring place but what suffered blast damage. Hundreds of windows of structures on Wood and Water streets were shattered. Oddly enough, some of these appear to have been blown inward by the force of the blast, while others tell outward to shatter on the sidewalks. Many persons on the waterfront at the time were knocked down by the impact which was felt by others at considerable distances.

Following the concussion, office workers swarmed from buildings throughout the area, crowds of them following the apparatus, responding on rapidly sounded multiple alarms. The Boulevard of the Allies was reported a "sea of glass after the blast." The West Penn Power Company at Wood street and the boulevard was a heavy sufferer. The heat from the fast spreading fire was severe.

Pedestrians and motor car drivers blocks from the waterfront reported flying debris and testified to the severity of the shock. Many were cut by flying glass and metal fragments. Some startled citizens spread the rumor that an atom bomb had exploded.

Following the explosion, light bluish smoke enveloped the boat, according to some witnesses. This gave way quickly to yellowish, then heavy, dark smoke which persisted for several hours, until the fire department had the blaze under control.

Firemen Handicapped

First arriving firemen, quickly on the scene, were confronted by milling crowds of excited persons and stalled motor vehicles, and experienced difficulty in getting into action. Almost the entire watefront at the point of mooring is given over to parking of public automobiles and at the time of the disaster it was nearly filled. The rows of parked cars on the Water street ramp impeded the work of the firemen and in themselves presented a serious exposure hazard as the fire grew in intensity.

Efforts were made by police and bystanders to move some of the parked autos; car windows were broken open to release brakes and a few were moved out of the danger zone. Fully seventy, however, suffered damage, either by the blast, or the radiated heat, which ignited interiors, burst tires, and blistered the exterior finishes. A number of persons were cut or burned in the attempts to move parked cars.

Some of the first fire fighting operations were directed at breaking up the radiated heat from the ship and covering the exposures.

Until the arrival, about 1:35 P.M., of the fireboat Cornelius D. Scully, except for some small streams played on the flaming hulk by the river steamer Charles I. Campbell, the only avenue of attack on the fire was from the Water street ramp. It was nearly 3:00 P.M. before the fire had been driven back by the barrage of heavy streams so that the first boarding party of firemen, led by Chief Davis and Deputy Chief John Maroney, was able to advance lines onto the wreck hull; and it was nearly two hours later before the wreckage had been sufficiently cooled to permit the first bodies—five in number—to be removed from what had been the upper part of the ship. These victims were all burned beyond recognition.

Shortly after this, Chief Davis ordered firemen off the boat as the wreck began to settle. When they returned again, the vessel was on the bottom, in about twenty feet of water, with approximately fourteen feet of skeleton wreckage showing above water.

At this stage additional lighting and cutting equipment was called for to enable firemen to penetrate the tangle of wreckage. Nine companies remained on duty at the scene most of the night. The search for missing was carried on under searchlights until after 2:00 A.M., without locating more than fragments of bodies, at which time efforts were discontinued until daylight.

100,000 Spectators

All through the night crowds of thousands jammed Water Street to watch operations. Police estimated the total number of spectators during the day at 100,000 and credited them with helping to cause one of the worst traffic jams in the city's history. Traffic on the Liberty and Manchester Bridges was made one-way. So many people jammed the Smithfield street Bridge that police were forced to clear it, fearing it might collapse under the additional weight.

All off duty police were called to duty in the emergency and special squads were occupied until well after midnight clearing out the area and guarding the buildings that had suffered blast damage and in which burglar alarms were made inoperative.

Rescue Efforts

The blast that shook the city's "Golden Triangle," the lower business section, knocked many victims into the muddy Monongahela and stunned and injured others at the waterside.

Citizens joined with firemen and police in efforts to rescue those in immediate danger of burning or drowning. Rescue efforts were greatly aided by the courageous action of the crew of the steamer Charles Campbell, which was passing in the river at the time of the blast. Its captain immediately ordered it in as close to the stricken Queen as possible, put overboard a dinghy, and its crew threw lines to the victims struggling in the water. Four persons were pulled in with a single cast. The Campbell then assisted the fireboat Scully by directing streams on the burning vessel.

Small craft which dotted the river near the burning steamer were ordered away by Chief Davis as they were interfering with the operation of the Fireboat Scully, and in handicapping organized rescue work. Because the city's police launch was disabled at the time of the disaster it was some time before the order could be carried out.

Firemen and others using small boats and grappling irons recovered several bodies but nearly a dozen victims were believed submerged in the twisted wreckage of the boat, and U. S. Engineers with diving suits were summoned to locate these.

Loss Will Exceed $1,000,000

Chief Davis placed the total damage to the Island Queen and shore property at about $1,000,000. The ship was valued at $600,000 and the damage was reported to be covered by insurance.

Pacific Coast Chiefs Vote to Remain in I.A.F.C.

The 52nd Annual Convention of the Pacific Coast Association of Fire Chiefs was held September 15-18, 1947, at Spokane, Wash., with an attendance of approximately 500.

The group was welcomed by Mayor Arthur R. Meehan and Host Chief James T. Blamey at the Fox Theatre. Chief John H. Marston, Fire Department, Stanford University, Calif., gave the response. The open meeting was addressed by President Chief John H. Alderson of Los Angeles and the forum topics were led by George W. Clark, Seattle, northwest counsel, National Board of Fire Underwriters who discussed owner's liability for the origin and spread of fire.

Presiding at the discussions was Chief L. C. Canning of Midvale, Utah. W. Walter Williams reviewed the developments of the President's Conference on Fire Prevention; C. N. Key, supervisor, Pacific Telephone and Telegraph Company discussed scientific communications; Col. George S. Clark of Spokane talked on military training as an asset to the fire service.

Others who addressed the convention were: R. C. Stange, assistant general manager, National Board of Fire Underwriters whose subject was "The Na-

Continued on page 745)

EPIDEMIC OF FIRES HITS CALIFORNIA COMMUNITIES

Commercial Buildings, Hotels and Forested Areas Among Those Involved

By Bob Greenock

ONE fireman was killed, at least a dozen others were injured and two civilians were missing in a series of fires in Northern California during the last half of July. In addition an explosion and fire in a garage in Pomona, west of Los Angeles, took the lives of two men and injured two others seriously on July 25.

The fireman killed was Louis Cetraro, 29, father of three who lost his life when the roof caved in while he was fighting a six-alarm warehouse blaze in Oakland. Six other Oakland firemen were injured as the $175,000 fire roared through the Lerman Sales Company warehouse for war surplus goods at 1946 Adeline Street and spread to the Coastwise Movers warehouse at 1121 Twenty-first Street, a machine shop, a telephone truck storage building and a residence.

The fire occurred shortly before midnight on July 16, a half-hour before Fire Chief William G. Lutkey was to have retired at the age of 70.

Chief Lutkey, who left a party honoring his birthday, directed operations until 4:30 A.M. Oakland health authorities said 10,000 units of blood plasma in the warehouse were destroyed.

In Stockton on July 24, a flash fire believed to have started from a hot box in a barley crusher, destroyed the major portion of the Poultry Producers of Central California warehouse, causing damage estimated between $250,000 and $500,000. More than 200 firemen from the Stockton Fire Department and from the Coast Guard and Navy battled the blaze for four hours. Four were injured. Coast Guard fire boats aided the land fire fighting forces.

At Susanville, Lassen County, fire gutted the three-story concrete Mt. Lassen Hotel early on the morning of the 24th, doing damage estimated at $100,000. Two men, a night clerk and a bootblack, were missing after firemen rescued thirty guests. The two missing men were feared trapped in their basement rooms.

Fire Brigades Numbering Close to a Thousand Men Were Aided by a Helicopter Equipped with a Two-Way Radio, August 6. The Pilot Maintained Radio Contact with the Ground, Pointing Out Fresh Outbreaks of Flame that Had Already Seared Thousands of Acres of Big Tujunga Canyon, California. The Pilot, Fred Brown, Set Down on a Ridge near the Heat of the Blaze to Rescue Fred Dietzel, a Radio Operator, and Later Landed again to Bring Out a Heat Prostration Victim.

On July 25, an early morning fire swept an entire city block, including the historic New U. S. Hotel, a landmark of the Fifties, in the heart of Cloverdale, Sonoma County. The flames were visible for 20 miles and other Sonoma County communities, including Santa Rosa and Healdsburg, sent fire apparatus and men to fight the conflagration. It was not until after three hours that the threat of extinction for the little town of 1200 persons, famed for its citrus products, was removed.

A 16-year-old boy was the hero of the fire. Young Sam George dashed into the burning hotel, awakened fifty guests and directed them to safety. The fire is believed to have started in the hotel kitchen. It quickly spread to the building next door and then down the block, destroying a real estate office, a stationery store, plumbing shop, clothing store, barber shop and damaging a frozen foods locker building.

In San Francisco on July 24, a battalion chief and five firemen were injured in a three alarm, $25,000 evening rush hour fire that tied up traffic on Market Street for more than an hour.

The building, at 1621 Market Street, formerly was the Moose Building. The upper floor auditorium later was used as a dance hall, the Palomar ballroom but more recently lower floor offices were used by several AFL unions and the hall rented on a day basis.

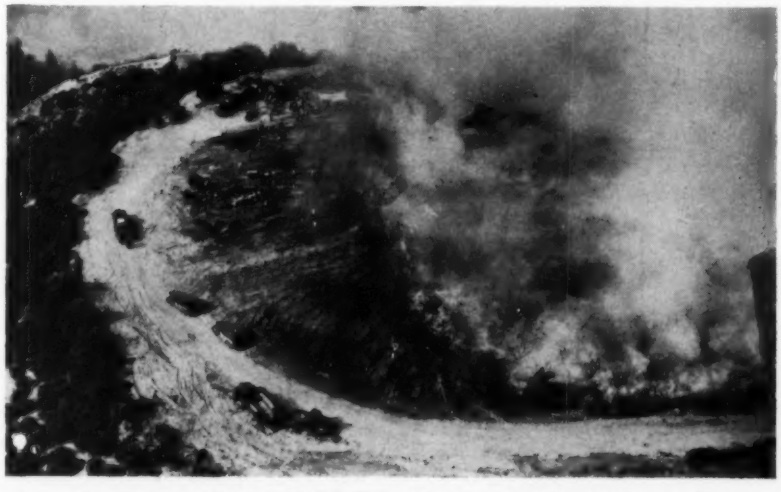
The firemen were injured when part of the falsework over the ballroom fell. Most seriously hurt were Battalion Chief John Webb, 48, and Fireman Richard Webb (no relation), 25, the latter from Rescue 1.

The fire fighters were directed by Acting Chief Engineer Martin Kearns in the absence of Chief Albert J. Sullivan who was on vacation.

In addition to the three alarm response, the Rescue Squad, Utilities Squad and two water towers were special-called. Two additional ambulances were also summoned.

Meanwhile, on the 24th and 25th, a series of brush fires in the Bay Area gave firemen a bad time. A grass fire ignited a dynamite packing shed of the Atlas Powder Company at Giant. The

(*Continued on page* 746)



Tujunga Blaze Reaches 5,000-Foot Ridge. Flames Creep up the Slope of Tujunga Canyon in the Los Angeles Hills toward a 5,000-Foot Firebreak Road as Volunteer Workers Fight to Keep the Blaze from Crossing the Ridge. The Three-Day-Old Fire Blackened Thousands of Acres of Mountain Country in the Angeles National Forest.

PRAIRIE FIRES LAY WASTE TO LARGE SECTIONS OF SOUTH DAKOTA

An Army of Volunteer Fire Fighters Battles to Control Blaze That Causes $2,000,000 Loss

A Staff Report

SAVAGE prairie fires, striking the drought-stricken areas in parts of five counties in South Dakota late in September laid waste to over 600 square miles of ferti'e land, with losses in excess of $2,000,000.

The major fire, a giant combination of three blazes, starting only a few hours and a few miles apart, about forty miles east of Pierre, S. D., swept northward from twenty to thirty-five miles along a twenty-seven mile line. It destroyed uncounted farm buildings, much valuable live stock, and game, and seared a vast acreage of crop and hay land, through the north half of Hyde County and parts of Potter, Faulk, Sully and Hughes Counties. The torrent of fire carried with it all the drama of prairie fires of pioneer days, with jackrabbits, pheasants and coyotes mingling with humans in fleeing before the flames which raced along at twelve to fifteen miles per hour.

Despite the rapidity with which the blaze traveled, and the hundreds of men, women and children who engaged in the struggle to control it, no loss of human life was reported. The only reported casualties were one farmer who was overcome by smoke, and another who was crushed between two cars during the fire fighting. Motor patrolmen, who raced through the area ahead of the fire, warning settlers, were credited with possibly saving many lives.

Speeding wildfire—flames that only nipped tops of stalks of wheat and grass—leap-frogged ahead of the slower ground fire that blackened the land in the worst disaster to hit the state since the drought of 1930.

While volunteer fire fighters from miles around converged on the scene, settlers in the sparsely populated region feverishly set backfires, dug trenches, ran machinery over the flames, cut furrows around the homes and barnyards, and drove cattle into the protective circle. Cattle in herds lumbered ahead of the fire until some were caught by fences. At one farm forty cattle trapped by a fence were so badly burned they had to be shot.

It was said an estimated 25,000 head of cattle were being fed on the 200 ranches and farms within the stricken area and first reports placed the loss of animals at 3,000 head or over. Revised estimates prepared by farmers and bankers, however, placed the known loss at about 125 head of cattle.

For more than twelve hours without relief, a 300-man army of farm and townspeople volunteers fought the spreading fires with every conceivable means at their command—using improvised water-carriers, tank trucks, milk and cream cans, wet sacks, mops, hand extinguishers and all available regulation fire fighting equipment. Some women fought the flames beside their husbands. Others made coffee and cool drinks and drove through smoke and flames to take them to the men. Towns, threatened by the advance, were bare of nearly all but women and children as the men took to the fire line. North of Harrold, S. D., farmers fought the advancing flames away from their very doorsteps. Others, not so lucky, saw their homes go up in smoke. Fire Chief George Adams of Gettysburg, S. D., said he believed "not a single spear of grass nor a haystack, remained in the region."

At the start, the wind was from the south but shifted during the first day to southwest, then to west and then northwest. It finally got to the northeast and then turned again to the southeast. As the fire turned on itself, weary fire fighters took heart and shortly before midnight the first day reported the advance was stopped. However, they had to return to the battle northwest of Highmore, S. D. next day when a new prairie fire along a mile front near the Sully-Hyde county line was spotted by airmen.

Radio Aids Fire Fighters

Burned out communication lines complicated the fire control operations.

It was not until law enforcement agencies made their radio communications facilities available that appreciable organized fire fighting was possible. As radio communications were established, tank trucks, equipment for cutting furrows, and fire apparatus and personnel were moved and re-located, in some sections. Shifts in the wind brought fear that the fire would sweep back through the towns of Holabird (pop. 78), Harrold (pop. 202) and Highmore (pop. 1004) all on highway 14 near where the fire started. Firemen, aided by the wind, were able to keep the blaze from entering these places, however.

Les Price, chief agent of the law enforcement division, attorney general's office, described the fire as "probably the worst in (S. D.) history. Included in the losses was $800,000 worth of stacked hay; an equal amount of uncut grass, which had been expected to feed about 25,000 head of cattle. Another loss was about $500,000 in fence posts (farmers placed the cost of ths posts at 57c apiece). More than $50,000 was lost in houses and outbuildings. The loss in cattle was not determined, but is said to exceed $15,000.

Bird's-Eye View of Fire-Blackened South Dakota

A lone barn stands sentinel amid thousands of acres of desolation following costly September prairie fires. Square patches in photo are plowed fields; blackened portions are burned over areas. Behind the barn and at far left (beyond road) are smouldering ruins of farm houses of Paul and Ernest Gallogy, brothers, sixteen miles from Highmore, S. Dak.

Civil Service for Texas Cities

A new Texas law, passed during the last session of the legislature, requires that a referendum be held on the question of adopting civil service for firemen and policemen in all cities of 10,000 or more population. The law, which became effective September 5, provides that a special election be scheduled within 90 days after the effective date. According to the 1940 federal census, 48 Texas cities have populations of 10,000 or more. Eight of these—Amarillo, Corpus Christi, Dallas, El Paso, Fort Worth, Houston, San Antonio, and Waco—already have civil service laws in effect.

The law provides for the appointment of a three-member fire and police civil service commission, and further provides for the appointment of a director of civil service by the commission. One provision of the law prohibits firemen and policemen covered by the act from engaging in strikes, under penalty of automatic dismissal, fine, and imprisonment.

Mayor J. C. Trahan, of Texas City, Tex., Holds Certificate of Ownership of the F. M. C. High-Pressure Fog Fire Fighter, which He Has just Accepted on Behalf of Texas City from John B. Crummey, Chairman of the Board of Food Machinery Corporation. Looking on Are Bob Horton, in the Cab, Fire Chief Fred Dowdy, Left, and R G. Pulver of the John Bean Mfg. Co., Lansing, Mich., Right.

Fire Truck Presented to Texas City

Rebuilding of the Texas City, Tex., Volunteer Fire Department, which was completely destroyed in the April 16 disaster, took a big step on June 3 here, when Mayor J. C. Trahan received the gift of a new fire truck on behalf of Texas City.

The new truck is a duplicate of the Pasadena, Texas, unit that fought fires continuously for 60 hours immediately following the explosion. All Texas City fire fighting equipment had been wiped out and more than half the members of the Texas City Volunteer Fire Department killed.

Mayor Trahan received the gift from officials of Food Machinery Corp., parent company of John Bean Mfg. Co., who made the truck. It is an F.M.C. high-pressure fog fire fighter, employing fire fighting techniques developed mainly during World War II and used extensively by the Army and Navy.

Immediately following official presentation ceremonies, demonstrations in fire fighting gave Texas City people a chance to see what their new truck can do.

The new Texas City F.M.C. high-pressure fog fighter provides two nozzles, known as guns, at 30 gallons capacity each. It gives 850 pounds pump pressure, and carries its own water supply.

Skyscraper Fire Causes Near Panic

An unusual fire in a 42-story midtown Manhattan skyscraper in mid-afternoon gave New York firemen nearly two hours of punishment, resulted in hurried evacuation of over 2,000 tenants, while scores of others suffered near-panic, and caused considerable loss to a "fireproof" building.

The structure, located at 515 Madison Avenue, near 53rd Street, is of modern fire resistive construction; it is equipped with standpipe and building alarm, central station manual fire alarm boxes and sprinklers having water-flow alarm, on all floors. It is occupied by offices above the ground floor. On the 42nd floor is radio television station WABD, which was in operation at 3:45 P.M. when the fire was discovered. Two banks of elevators serve the more than 2000 tenants.

The fire started, evidently, from a short-circuit in or near an empty elevator car which is said to have been undergoing repairs, at the 20th floor level. It was discovered by Charles Gratz an elevator operator, who quickly unloaded his passengers and sounded an alarm from a manual box on the 10th floor. This was received by the A. D. T. at about 3:45 P.M., almost coincident with the receipt of a water flow alarm, indicating that sprinklers were in operation. The call was at once transmitted to the Fire Alarm Telegraph Bureau which also received a box alarm at about the same time.

Engines 8, 65 and 23, with Ladders 2 and 4 responded with the Chief of the 8th Battalion, to find some smoke coming from the top floor windows while startled tenants were hurrying out the main entrances. Although many windows contained tenants, there was no apparent sign of panic until a woman on the 20th floor leaned far out and screamed. Occupants of windows in the same building and nearby structures shouted to her not to jump, and apparently calmed her.

Meanwhile firemen connected lines to the building standpipe system, while others entered with their doughnut rolls of hose and tools, only to find all eleven elevators in the south bank immobilized. There was nothing to do but climb the stairs.

The fire, which apparently centered about the 20th floor, where the south bank of elevators end worked upward and downward in the elevator shafts, feeding on the grease on cables and tracks. It is still a mystery to many how the limited amount of combustibles could develop sufficient heat to practically melt down some elevator doors and warp others, while parting elevator cables, permitting one elevator to drop to the basement, a mass of twisted metal and cable. The heat also fused three sprinkler heads located on the 20th floor. These had no effect on the fire in the shaft but possibly served to prevent its extension into offices.

The building fire alarm was sounded shortly before 4:00 P.M. and office workers and others, including former Postmaster General Chairman of the Coca-Cola Company, James A. Farley, took the long descent to the street, using the structure's enclosed stairways, which were free of fire and smoke.

Firemen had considerable difficulty in locating the heart of the fire, and in

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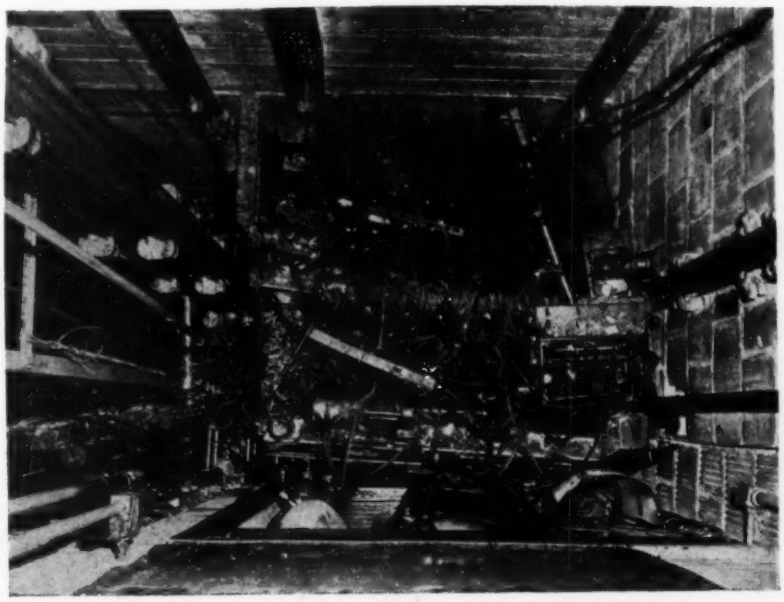


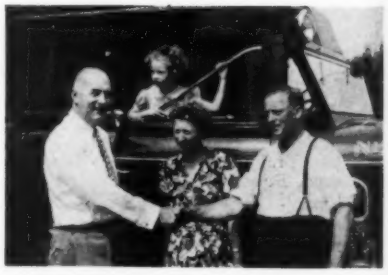
Falling Elevator and Cables Land in Shaft at Basement Level During Fire in New York Skyscraper

Some Random Shots of the Recent I. A. F. C. Meeting in New York

Top (from left to right): President Charles A. Delaney relinquishes his office to incoming President Frank McAuliffe; the newly elected Second Vice-President, Chief William J. Cawker, Topeka, Kans.; Chief Albert J. Sullivan, San Francisco, Cal., and Chief Howard Dey, New Orleans, La. (Photos by Chief H. B. Wells, Camp Gordon, Ga.)

Center left: The N. B. F. U. Cocktail Party. (Photo by Chief H. B. Wells.)

Center Right (Top) President Frank C. McAuliffe with Mrs. McAuliffe and granddaughter Elizabeth Ann McAuliffe, visiting Chief Harold Walton, New Toronto, Ont., President of the Dominion Association of Fire Chiefs. (Below) The McAuliffe family visiting Toronto on the way home from the I. A. F. C. meeting in New York, showing left to right, Miss Dolores McAuliffe and Miss Eileen McAuliffe, daughters of Chief Frank McAuliffe; granddaughter Elizabeth Ann McAuliffe, and Miss Anne Scott, daughter of Fire Marshal W. J. Scott, standing in front of the entrance doorway of University College, University of Toronto. (Photos by W. J. Scott.)

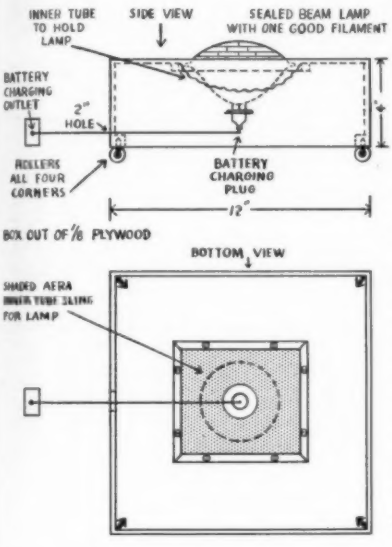


Below: The Louisiana delegates pay a pre-convention visit to the Flynns at their summer home in Amherstburg, Ont. Standing (left to right) are Chief F. Privat, Rayne, La.; Miss Mary Delle Bogan, Baton Rouge, La.; Mrs. John Marsh, Amherstburg, Ont.; Chief H. L. Dey, New Orleans, La.; Mrs. B. A. Bogan, Baton Rouge, La.; H. J. Callahan, retired Chief, Detroit, Mich.; J. M. Kidd, Baton Rouge, La.; Mrs. H. J. Callahan; Chief B. A. Bogan, Baton Rouge, La.; John Roth, New Orleans, La.; Chief Irby Gascon, Plaquemine, La.; Captain J. Earl McQueen, Amherstburg, Ont.; Mrs. G. A. Godet (daughter of the Flynns); John Marsh, Editor of the local paper; Chief A. A. Hanson, Westwego, La.; James J. Flynn, the host. Seated (left to right): Mrs. W. C. Williamson, Baton Rouge, La.; Miss Kitty Williamson, Baton Rouge; Miss Virginia Arbour, Baton Rouge; Mrs. H. L. Dey, New Orleans, La.; Miss Gertrude Adams, Westwego, La.; Chief L. F. Kibneman, Morgan City, La.; Mrs. J. M. Kidd, Baton Rouge, La.; Mrs. Irby Gascon, Plaquemine, La.; Mrs. Louis Fontane, Baton Rouge, La.; Mrs. F. Privat, Rayne, La.; Miss Dorothy Wiswall, Middleton, N. S.; Mrs. J. Earl McQueen, Amherstburg, Ont.; Mrs. James Flynn, the hostess; and Mr. W. C. Williamson, Baton Rouge, La.

Short Cuts and Gadgets

LET THERE BE LIGHT

It has always been a problem for those engaged in repair and maintenance work on fire apparatus, particularly where no pits are available, to get adequate light on the under-side of the vehicle upon which they must work.



A contribution from Wm. J. Toelle, Evansville, Ind., "throws more light" on the question, we hope literally as well as figuratively. He writes: "If any of the Brothers are suffering from lack of light when working under the rig when in quarters, I suggest using a few pieces of scrap material, a discarded Sealed Beam Lamp with one good filament and your battery charging outlet to overcome this condition.

"Just make a box 12-in. square with 4-in. sides; mount on some old casters; cut a hole in the center just a bit smaller than the lamp lens; hold in place with a piece of old inner tube. Twist the lamp connections to fit the battery-charging terminal plug-in and climb under the truck with light to spare."

* * *

WETTING AGENTS IN EXTINGUISHERS

This may prove to remove some of the limitations on the use of wetting agents (water wetters or surface extension reducers) in soda and acid, pump tank and gas cartridge type extinguishers.

It has ben claimed that the use of solutions of wetting agents in soda and acid extinguishers is impractical if the solution is used in effective wetting concentration. Excessive foaming, it is said, slows down the rate of discharge and causes the extinguisher stream to spray badly, seriously affecting the stream range and the effectiveness of the unit.

In some cases, it is claimed the discharge and effective range have been reduced twenty-five per cent. This may be, as the otherwise solid stream is largely discharged as a spray.

Since most extinguisher nozzles are of standard size and material, it is safe to suggest the following: (1) Cut in half the lead type nozzle and, if "F D type" shut-off nozzle, remove the end tip. This will give a wider and more effective stream (2) Remove the strainer at the point of discharge on the inside of unit. It is at this point that the reaction of the soda and acid chemicals and the wetting agent causes excessive foaming, thus causing, in part, the CO_2 gas now created to discharge rapidly through the small nozzle which causes the stream to spray badly, and affecting the range.

The use of such agents (water wetters) in extinguishers appears to be a "must", especially in overhauling work and in fighting fires in bales of cotton, hemp, paper and other such fires (do not overlook those sofa and other jobs you know, the "smoker's delight."). It reduces the danger of re-ignition and helps stretch out water supplies.

After these minor alterations, I think you will find your hand extinguishers more effective when a water wetter is added. Incidentally, wetting agents seem to accelerate water corrosive action on the steel containers (pump tanks) so don't forget to give them a coating of asphalt, or your own idea of protection.(*)

Francis Burke, Fire Protection Engineer, Howard, R. I.

*It should be pointed out that not all wetting agents have appreciable corrosive action on metal used in hand extinguishers, although some do. It may be well to check this factor in selecting the wetting agent for use in metal containers.—The Editor.

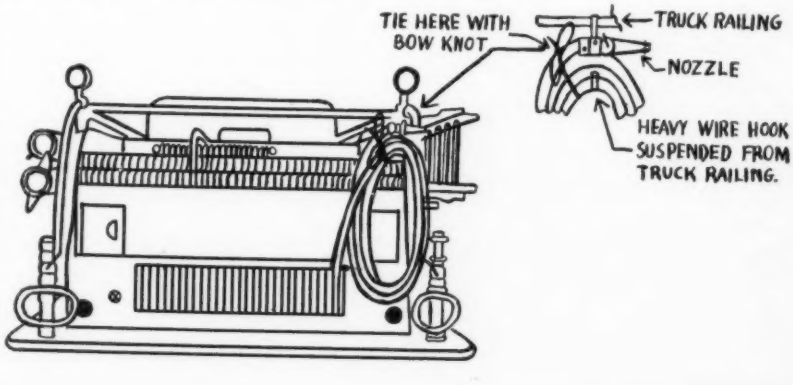
* * *

SPEED UP SMALL LINE USE

From John D. Berwick, New York City, comes this "short cut" to facilitate small-line operation. He writes: The accompanying sketch illustrates an idea I picked up from the Baltimore (Md.) Fire Department while in the service, and which I do not believe has appeared in your "Short Cuts" previously.

Twenty-five to thirty feet of booster line is coiled and bound just behind the nozzle with a short piece of light cord, tied in a bow-knot, as shown. This coil is hung from the truck by a heavy wire hook affixed to the hand-rail or by some other suitable support. When the booster line is stretched in, the lead-off man takes the entire coil as close to the actual fire as practicable and unties the binding cord. This gives him a considerable portion of slack line to work with and avoids the necessity of pulling up sufficient slack around corners, up stairs and ladders and other places where the hose would be very apt to bind and snag.

Although the sketch shows this idea applied to a rear-mounted booster reel, the idea could be applied equally well to a booster line on a midship-mounted reel or a booster line carried in a basket.



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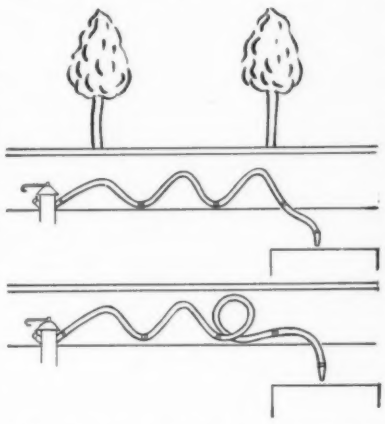
TO SIMPLIFY HOSE ROLLING

George C. Ahrens, member of the Teaneck, N. J., Fire Department, comes up with this idea for rolling heavy 2½-inch hose the "simple way".



To make it easy for one man to take up slack in the line when it is coiled all over the street and a few feet more is necessary to reach an objective, it's a simple matter for one man to make a big loop in the hose, lift it upright, but not off the ground, and roll it ahead of him just like a hoop. It's no effort at all if the line is charged, whether the nozzle is open or shut. And it eliminates the labor of trying to drag a heavy line full of water.

* * *

The Old Timer Says—

After shutting down a charged line, large or small, while operating inside a building, it's a good plan to immediately carry the nozzle to a window and stick it outside. This will prevent any damage from leakage or accidentally kicking open the nozzle while it's lying on the floor.

The ROUND TABLE

For Practical Discussion of Current Fire Department and Fire Management Problems

EXTINGUISHING DUMP FIRES

THE discussion in this Round Table is a continuation of that which appeared in the September issue of FIRE ENGINEERING on extinguishing dump fires.

The generous response from our readers made it necessary to carry the discussion over to this issue.

Readers are invited to send in their comments on this subject and on next month's subject which is described in a box on a subsequent page. Address communications to Round Table Editor, FIRE ENGINEERING, 24 West 40th Street, New York 18, N. Y.

Discussion of the Topic

C. E. Ginther, Chief, Rochester, Minn.: We do have a city dump manned and equipped by the City Engineers department. We did all fire fighting in the area until quite recently. These fires are hard to fight and rekindle practically all the time. They are almost impossible to put completely out of late. Water main and hydrants have been put in and they bought 500 feet of 2½-inch hose and nozzle. The work is now being done by the men working there. It looks like a very good idea, and we hope that it will work.

R. G. Duren, Chief, Greenwood, Miss.: Rubbish dumps are maintained by our city, the present one being about one mile outside of the city with no water available. We are called upon quite often to extinguish fires in same, but due to the distance from the fire hydrant we call upon the street department with their flusher to assist us. The fires are very stubborn to extinguish and rekindle frequently. I think the water wetting agents will be very helpful in extinguishing these fires.

To eliminate this, trenches could be dug and rubbish covered with earth, or, if possible, move the dump out quite a distance from town to an isolated area where odor and smoke would not be a nuisance and keep it burning.

A. G. Kollman, Chief, Blue Island, Ill.: We are frequently called upon to extinguish fires occurring on open garbage and rubbish dumps maintained by the city. We pull the garbage apart and then keep putting water on to it.

I would suggest that the garbage be spread very thin over a section, and not be piled too thick. This would not give it a chance to form a combustion

Leo J. Urbanski, Chief, Saint Joseph, Mo.: Open garbage and rubbish dumps are maintained outside city limits. We are frequently called upon to extinguish fires thereon.

We flood and bore with 2½-inch hose lines to extinguish the fire. Rekindles frequently occur in hot weather.

I would suggest incinerators instead of these open dumps.

Harley Yocum, Chief, Atchison, Kan.: Our city maintains one large dump. We are frequently called upon to extinguish fires on it. We use a booster line to extinguish the fires. At one time there were dozens of truckloads of corn cobs and blue grass screenings dumped and then everything that it takes to make up a dump was piled on top of this. That was when the trouble began. Fires would start from spontaneous ignition, creating a smoke nuisance. It was often necessary to use 2½-inch hose lines for hours at a time to extinguish the fires.

I believe dumps should be maintained outside the city, where they might be left to burn all of the time, eliminating rats, insects, smoke nuisance, disease, etc.

John Hawley, Chief, Adrian, Mich.: Rubbish dumps are maintained by the city. When we are called upon to fight a fire thereon, we flood it and use a dump nozzle. The fires are stubborn to extinguish and often rekindle.

I believe a man should be put in charge of the dump, whose job it will be to collect junk and paper and burn combustible material as it comes in.

Frank Pulaski, Chief, Boise, Ida.: The garbage in this city has for years been hauled to hog ranches outside the city.

Until two years ago, inorganic rubbish was used for fill when needed inside the city and frequently was afire. We use 1½-inch and 2½-inch hose layouts and straight stream nozzles to extinguish these fire.

At present all rubbish is hauled outside of the city and burned in the open. I believe an incinerator is best where needed.

C. W. Wyrick, Chief, Greensboro, N. C.: We have an incinerator in this city.

Before it was built we frequently were called upon to extinguish fires thereon. We wet down the dumps and then used steam shovels to turn them over.

The incinerator is the best method for disposing of all garbage and rubbish.

J. T. Shelley, Chief, Calgary, Alta.: Garbage and rubbish dumps are maintained by the city. When called upon to extinguish fires thereon, we use 2½-inch hose lines.

A dump fire is very stubborn, depending upon the depth of the dump or garbage. Rekindles frequently occur, because the fire is hard to reach. The water is quickly evaporated due to the tremendous heat generated by the actual fire at the bottom. We have spent as many as twelve to fourteen hours on a dump fire, pouring thousands of gallons of water onto it. To get rid of the nuisance, we had to let it burn itself out.

I believe incinerators are the best answer to the problem.

Ira D. Leech, Chief, Decatur, Ill.: Open garbage and rubbish dumps are maintained outside the city limits.

When a fire necessitates calling the fire department, we use an OCD pumper with pipe line across to dump a distance of about 450 feet.

Bulldozers should be used to pack the dumped material down, or the material should be deposited in a thin layer, which should be wet down each night. The dump should be under the care of a man paid by the city who should have the power to act to eliminate fires.

F. L. Crouse, Chief, Huntington, W. Va.: Rubbish dumps are maintained by the city.

We use high pressure turret nozzles to extinguish fires occurring thereon. We do not have rekindles.

It is my opinion that dumps should be maintained at least five miles outside the city. Those which we have at present are about two miles out.

John Tobar, Chief, Austin, Minn.: When dumps were located within the city limits we were called upon to extinguish fires thereon. They are now maintained outside the city limits.

I believe a city incinerator is the best answer to the problem.

Karl Evans, Chief, Reno, Nev.: Open garbage and rubbish dumps are maintained by the city. When called upon to handle fires thereon, we use booster line and hand tools. These fires are stubborn to handle and frequently rekindle.

I believe the best method for eliminating this nuisance is to build an incinerator with applied fire, equipped with oil or gas burners.

Thad Rogers, Chief, Hot Springs, Ark.: Open garbage and rubbish dumps are permitted in the city. We are not called upon to extinguish fires

(*Continued on page 761*)

HERE IS THE QUESTION

1. **Are open garbage and rubbish dumps permitted in, or maintained by, your city?**
2. **Is your Fire Department called upon to extinguish fires occurring thereon?**
3. **If so, how are they handled?**
4. **Do you find them stubborn to extinguish?**
5. **Do rekindles frequently occur?**
6. **What method would you support for eliminating this nuisance?**

The WATCH DESK

Overhauling the firemanic news of the day

by ROI B. WOOLLEY

We Prescribe Wet Water

In the City of Brotherly Love one William O'Toole, 43, went to bed, 'tis said with a fairish cargo of liquids, but not wet water. When firemen broke into his room in the Hygeia Hotel to extinguish a fire in his mattress, O'Toole was still sleeping—but still!

Gentle hands helped guest O'Toole—still insensible—into another room while the brothers went to work on the burning bedding. The mattress they took out of doors to a fire escape, where in the approved tradition they "doused it with water", to quote the press.

Then, two hours later, firemen were re-called. Un huh—a-rekindle; in the mattress this time and right outside the tired O'Toole's window.

Again the Brothers went to work and this time there was no chance of the disemboweled bedding setting itself off again. Again, guest O'Toole slept through the fracas.

You can write your own postscript to this 'un. The printer's devil suggests "Less firewater, more wet water."

* * *

Lightning!—Alack and A—Lass (and a Leg)

Things seemed to have happened on Stoner Seitz's farm near Lancaster, Pa. Lightning started a fire one night in the barn. The telephone wouldn't work, preventing a call to firemen. Then Mrs. Seitz's daughter, Esther, began ringing a large bell on the roof to summon help. And the rope broke. She climbed to the roof to operate the bell by hand—and fell thirty feet to the ground, injuring her leg. As a fire truck, called by neighbors, sped to the scene, a fireman fell off the rig and injured his leg.

Mr. Seitz estimated his loss at $20,000 not including doctor's bills.

* * *

Well, Firemen Don't Sleep Anyway!

In Hammond (Ind.), Mr. and Mrs. Clifford Sharp, caretakers at the Black Oak Fire Station, hadda go shopping for a new bed.

During housecleaning, the Sharps parked their bedstead on the rear of a fire truck. Un huh—a few minutes later the truck went out of town on an alarm—with the bed. It came back without it! Sharp retraced the route it took but "no soap"—and no bed! (Thanks Smokestack Hardy).

* * *

R.S.V.P.—But Not Firemen!

Earlier this year, Jersey City, N. J., firemen were burning up, following an insignificant automobile fire.

There fire wasn't so much the fire as the fact that they weren't invited to it! Worse still their rivals, the police, were recipients of the "exclusive" invitation, if you please!

Seems that one morning the telephone rang at the Seventh Street Police Station. Lieut. Leo O'Connor, so the reports hath it, picked up the receiver and heard a feminine voice say: "My automobile's on fire—but don't send the firemen. They'll chop it up. Please send policemen!"

She gave her address, and hung up. So Lieut. O'Connor dispatched a fellow-lieutenant and two henchmen to the scene. They found Mrs. Sadie Thompson standing beside her smoking auto.

Police reported the smoke was pouring from under the dashboard "probably as a result of crossed wires." Using an extinguisher, they doused the "smoke effusion", says the wayward press.

According to contrib' Charles Breitwieser of the J. C. F. D., the only things that got crossed-up was the fire department!

* * *

Hot Off the Tape

Robstown (Tex.) papers recently said: The Robstown Fire Department this past month purchased a single-phase siren . . . which will be used in addition to the present fire-*horse* siren. . . . A fire was delivered to the front door of Engine 5, Newark Fire Department, when a van loaded with blazing furniture drove up. Mission accomplished! . . . Exploding auto tire, touched off by heat from a burning front porch, may have saved the lives of five persons, two of them aged 82, by awakening a granddaughter in time to enable her to spread the alarm. Firemen saved most of the Towson (Md.) two-story structure. . . . Convicted for the sixth time of turning in a false alarm of fire, Jean Kelly, 38, Manhattan, was sentenced to a fine of $100 or thirty days in jail plus an outright jail term of thirty days. . . . In Hazardville (Conn.), what's in a name! A bolt of lightning hit a warehouse and fifteen of seventy-five field hands huddled inside seeking refuge from the storm were injured. . . . A night field fire near Baileys Cross Roads (Va.) attracted a crowd which caused a traffic jam as fire engines tried to reach the scene, Fairfax County police reported. "Radio bulletins were believed responsible for attracting the crowd. A station described the fire as a big one." (Thanks Irv' Johnson). . . . Fewer than half of 600 Indiana townships surveyed by the State Fire Marshal's office have "no fire protection whatever" it is reported. . . . In Tacoma (Wash.) ten doctors worked in relays removing the skin from the backs of eleven donors in an attempt to save the life of Eldon Clark, 25-year-old war veteran. . . . In Camden (N. J.) Anthony Casemento, Lenore Ridgeway and the Rev. Franklin T. Buck formed a bucket brigade to put out a fire in the basement kitchen of the Centenary Tabernacle Methodist Church. Then they returned to the altar where the Rev. Mr. Buck married the couple.

* * *

Jeep-ers! Over the Hills 'n' Far Away!

Contrib' E. E. Gentry, Marthaville (La.), pops this 'n about Butler W. Reed of around Arlington (Ohio) who has found out that a fire truck isn't quite like a jeep!

Brother Reed, who once helmed a jeep, made a bet that he could drive a fire truck as he once piloted that war-spawned abbreviation of a motor vehicle. He picked on the Arlington Fire Department to try his experiment—reports stating that he "swiped" the truck for the occasion.

Youthful Reed, it is said, used up all the gas gears, pedals and whathaveyou as he plowed across fields and highways and laid low "many miles of fences." He won the bet—$25.

But culprit Reed was haled before the constabulatory to pay $500 damages to the local village, and as further punishment, he was to report regularly to the town hall to polish the fire truck. The polish was supplied free. Tally Ho!

* * *

"Fire Horses" Go in for Arson

Frightened by a grass fire, a team of horses spread flames that completely destroyed the house and barn of Amasa Slingerland between Unionville and Clarksville (N. Y.), not far from Albany. The fire then spread across fields to threaten neighboring farms.

Witnesses said the horses bolted through the burning grass, igniting a load of hay, then kept on to a barn with the cargo of fire burning behind them. Six children who were taking music lessons from Mr. Slingerland's daughter left before flames spread from the barn to the house.

Fire apparatus and men from Westerlo, Slingerlands, Clarksville, Delmar and Elsmere struggled two hours before controlling the fire.

Neither the news report, nor our anonymous contributor (from Crockett, Calif.) mentions what happened to the "fire horses."

* * *

Thereby Hangs a Tail

In Prince Frederick (Md.) a pussy cat started the whole thing, according to Mrs. Julius Parran. The chain of event goes something like this—

As Mrs. Parran and her 5-year-old daughter sat in their living room on a Saturday night, her pet feline was frolicking in an upstairs bedroom. Somehow, in its play, it knocked over a kerosene lamp, which set fire to the bed.

The blaze heated cartridges in a .45 automatic, which fired three shots which, in turn, alerted Mrs. Parran. The latter, called firemen, grabbed a bucket and 'tis said, by the time the vamps had completed their twelve-mile run from Prince Frederick, she had the blaze under control and had forgiven the cat.

All we can say is Mrs. Parran oughta be signed up by the Bucket Brigade Boys—and it's too bad the .45 missed the pussy!

* * *

Turn 'Em Out!

In Verona (N. J.), Mrs. David Johnson rushed to the telephone and shouted excitedly into it: "I want to report a fire!"

A matter-of-fact voice at the other end of the line asked for details.

"Your firehouse," Mrs. Johnson replied "is burning up!"

And it was even so. Firemen, whose station is located across from the Johnson residence, came running, to find the rear of the building covered by a cloud of smoke.

The blaze, blamed on a defective electric clock, was extinguished with reported minor damage. (Thanks William Schwartz).

FALSE ALARMS

Backfired

Two glamour girls boarded a crowded city transportation bus and one of them whispered to the other: "Watch me embarrass a seat from one of the men!" Pushing her way down through the standees she bore down on a sittee who looked substantial and embarrassable.

"My dear Mr. Brown," she gushed loudly. "Fancy meeting you on the bus. Am I glad to see you! Why, you are almost a stranger. My, I'm tired!"

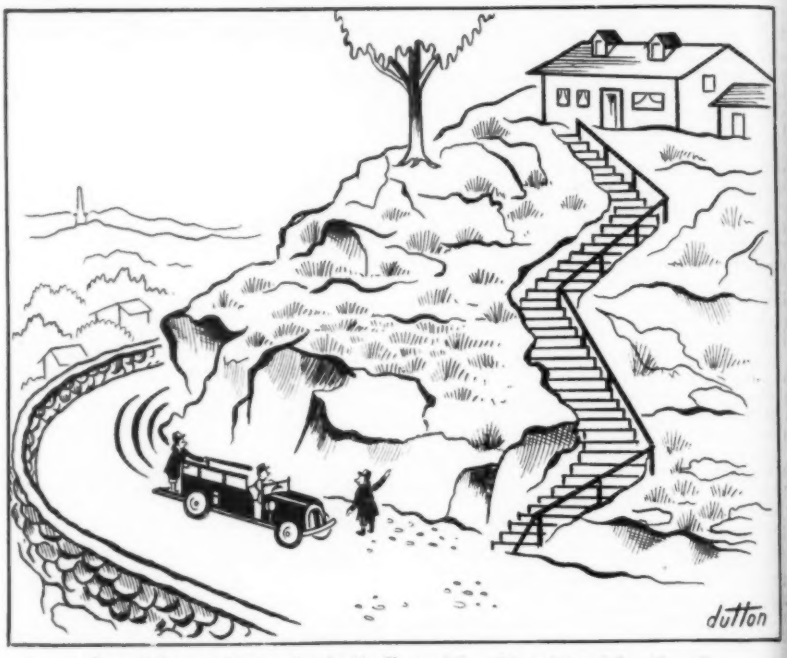
The sedate gentleman looked up at the girl, whom he had never seen in his life before, and as he rose, said pleasantly and for all to hear: "Sit down, Bertha, my girl. Don't often see you out on washday. No wonder you're tired. By the way, don't deliver the washing until Wednesday. My wife is going to the prosecuting attorney's office to see whether she can get your husband out of jail!"

Mama: "What did mama's little baby learn at school today?"

Sonny: "I learned two punks not to call me 'mama's little baby'."

Sam, the mechanic, was invited to pay a visit to a nudist camp. There was one stipulation made by his host: Sam would have to undress to get in. Reluctantly, Sam went into an old barn, disrobed, took a deep breath as one about to step into ice water, and strode out into the open—au naturel.

Two young married couples called to him. He joined them, wishing he had pockets to put his hands in. During the introductions he said to one of the very attractive young women: "I suppose it is socially proper to compliment you ladies, but honestly, I scarcely know where to begin."



"Doesn't Seem to Be Any Smoke Up There. I Sure Hope It's a False Alarm!"

Farmer Squibbs was ploughing the farthest corner of his field when a neighbor came running to call, "Quick, Henry! Your wife's having a fit." Squibbs dropped everything and ran a mile to his house, only to find his wife had recovered fully and was placidly cooking dinner.

A week later he was summoned again. This time, his wife, once more recovered, was darning stockings in the parlor.

A third time the neighbor called for Farmer Squibbs. This time he found his wife out cold on the kitchen floor. He felt her pulse and her heart. Neither stirred. He held a mirror before her mouth. There was no trace of moisture.

Farmer Squibbs straightened himself and mopped his forehead. "Well," he declared, "this is more like it."

"I Don't Care If Your Aunt Minnie Did Make It Just for the Boys. That's No Place for a Throw Rug!"

A school teacher told her pupils to listen to their parents' conversation and if they heard any new words to look up the meaning in the dictionary and write a sentence using the word properly. The next day she asked little Tommy what word he had heard. He replied that he had heard the word 'pregnant' and the definition given in the dictionary was "to carry a child." The teacher said, "Have you written a sentence using it?"

"Yes, ma'am," replied Tommy. "The fireman climbed a ladder into the burning building and came down pregnant."

The timid customer squirmed and fidgeted. Finally he beckoned the waitress and, looking embarrassed, he said "Could you tell me where the smoking room is?"

"Oh," the waitress replied, "you can smoke right here at the table."

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New York Pier Fire

(*Continued from page* 725)

tus; Chief Scanlon and Captain Beebe of Chief Murphy's staff.

10:29 P.M. Fireboat Gaynor (E 223) called from Brooklyn.

10:39 P.M. Rescue 2 called from Brooklyn.

10:42 P.M. Two more ladders special called.

11:06 P.M. Via radio, Chief Murphy ordered a third alarm assignment of Brooklyn companies to respond to the fire. Signal 66-572-77-33-236 was sent out by Fire Alarm Dispatcher John Barry. This brought ten pumpers normally assigned to respond to three alarms from Box 236 at Broadway and Johnson, near the Brooklyn end of the Williamsburg Bridge.

11:17 P.M. Fireboat Strong (E 51) called from Staten Island. One minute later the Fireboat Mitchel (E 232) was summoned from Greenpoint, Brooklyn, making a total of six boats at the scene.

12:34 A.M. Monday, Sept. 29, Ambulance 3 was special called.

10:43 A.M. Water tower 2 which had earlier returned to quarters was again called.

5:30 P.M. Searchlight 24 again summoned.

Total equipment at the fire, to this period: 38 pumpers; six boats; two rescue units; two towers; two F.D. ambulances; two light trucks; one field kitchen. Changing location: 22 pumpers, five ladders and three boats. The H.P. system was shut down at 2:06 P.M. Tuesday, September 30. Ambulance 1 returned to quarters at 5:41 that day at which time about 150 firemen had been treated for injuries, with a score hospitalized.

During the period above listed, nineteen other Manhattan fire alarms were answered by the department.

Air compressor units were supplied by the Fire Alarm Telegraph Bureau; Consolidated Edison; City Subway System and others. Numerous private ambulances were at the scene, and a score or more of private tugboats joined in fighting the fire.

Pier Facade Collapses

With a roar heard for blocks, the steel and concrete facade, all that was left standing of the burned-out pier, collapsed at 9:45 A.M., Wednesday, October 1, seriously injuring one man.

The front of the bulkhead building, measuring about sixty feet in height, running 150 feet between 15th and 16th streets, folded upon itself, carrying with it a section about forty feet high and 100 feet wide—the front wall of what had been company offices.

Weakened and ruptured from the avalanche of water played on them, the walls buckled and fell back toward the river. The West Side Highway was not affected by the debris.

As the structure caved in, Frank Koehler, 60, of the firm of Koehler & Koehler, marine surveyors, was caught in the wreckage and pinned in water up to his armpits. He had been with two other marine surveyors, T. O. Helperin and Capt. Melville Voge, surveying the damage in the ruined bulkhead building when Voge noted the wall was caving in. He called a warning and fled to safety. Koehler was trapped but the only injuries suffered by the others was

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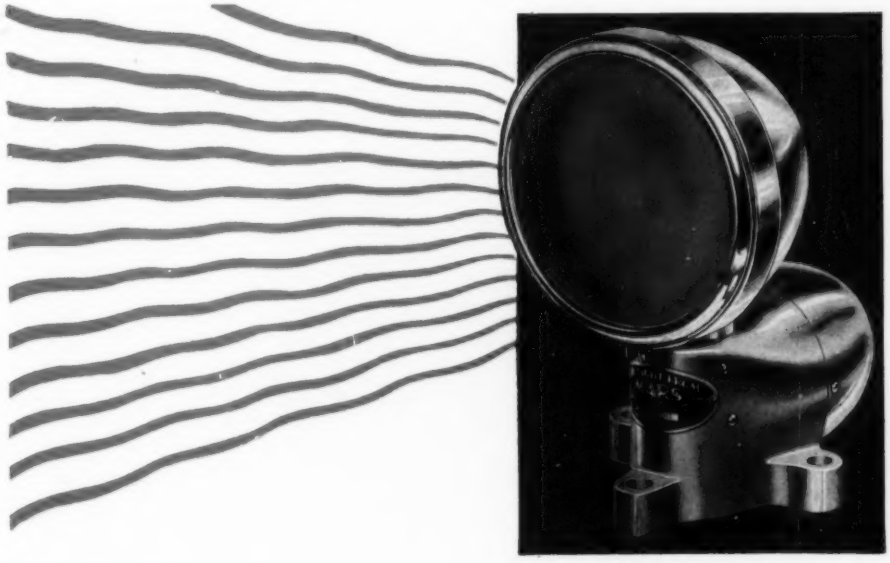

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a sprained ankle sustained by Helperin.

Koehler's predicament was discovered by firemen, two of them members of Engine 72 which had been operating directly in front of the structure, and Lieut. Peter Gilbody of the Fireboat Fire Fighter. A ladder was worked through the wreckage and Koehler was brought out, sufferin⌀ from submersion, and reported possible fractures of both legs. Koehler was removed to Roosevelt Hospital. John Farrell, a longshoreman, working on Pier 58, suffered from shock as a result of the accident and was taken to St. Vincent's Hospital.

The injuries to Koehler and Helperin, and treatment needed by Farrell brought the casualty list for the three-day period to 151.

Even before the cave-in of the bulkhead building, it had been decided to write off the wrecked pier as virtually a total loss. Frederick G. Reinicke, Commissioner of Marine and Aviation, had recommended that the ruins be removed and in this the Fire Department concurred.

Reinicke said that an estimate of $5,000,000 for rebuilding the pier "would be too liberal." The Fire Department, however, stood by its estimate of that amount of property loss. It was disclosed that the ruined pier was insured by the tenant (Grace Line) for $780,000 exclusive of insurance on contents.

No statement of loss has as yet been released by the underwriters. That the damage will greatly exceed that in the Cunard fire, the city's previously most costly pier fire, is considered certain.

The Grace Line fire is further evidence of the costly shortsightedness of ignoring obvious lessons on fire safety taught by similar pier fires during the past decade. Despite the examples of such fires, and the repeated recommendations of the Underwriters and officials of the New York Fire Department, little or nothing has actually been done to safeguard existing pier structures.

Following the $2,000,000 Cunard Pier fire of May 6, 1932 (Pier 54 North River), the New York Board of Fire Underwriters issued a report containing suggestions for action by the city, which builds, supervises and owns the piers on the waterfront. Not one of the improvements has been adopted, according to William G. Hayne, superintendent of the Bureau of Fire Prevention and Water Supply of the New York Board. Moreover, it is said a majority of the city-owned piers are in the same condition as was Pier 54 in 1932, and Pier 57, last month.

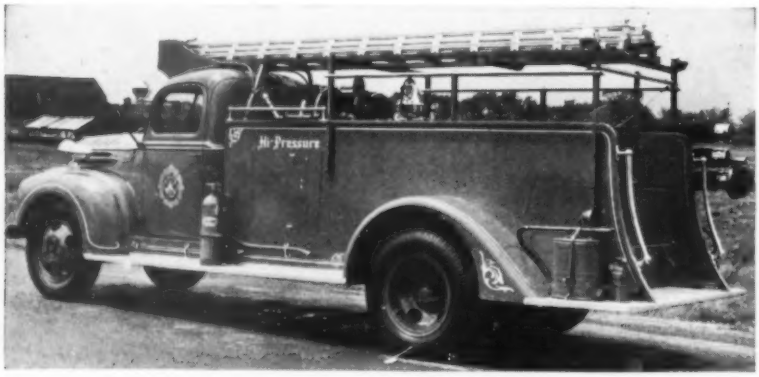
Chief causes for the destruction of both piers (and others on the New York waterfront) are (1) the failure to install bulkheads beneath the piers to stop the spread of the flames; (2) the lack of manholes in the pier floors or decks to enable substructure fires to be attacked by firemen.

Although the underwriters have for years appealed to the City's Department of Docks, and its current successor, the Department of Marine and Aviation, to remedy the conditions, no action has been reported taken. The department has been urged to adopt the National Board of Fire Underwriters Model Code but as it now stands, no code or regulations govern New York's pier construction. The Department of Building has a building code, which stipulates what safeguards should be included for protection of health and against fire and like disasters in all construction in the city. But there is one major exception—water front structures such as piers and wharves. They are under the jurisdiction of the Department of Marine and Aviation, and it has no code or standard requirements. Furthermore, the New York Fire Department, which must bear the shock—and no inconsiderable cost—of controlling pier fires, has no power to compel the installation of protective and preventive measures.

In the light of the Grace Line's disastrous fire, it is interesting to study the report of the Board for 1932 and see how it applies to this fire fifteen years later. The report reads (in part):

"In view of the enormous proportions reached by this fire (Cunard) after its prompt detection in an incipient stage, and the helplessness of the Fire Department equipment . . . there comes to the fire insurance business a serious uneasiness in the loss possibilities on this class of property. The fire continued to creep and burn for hours under the dock from the land to the river end (at Pier 57 this direction was reversed), despite the best efforts of a very large complement of fire apparatus, boats and firemen, whose hours of labor resulted only in preventing the fire from spreading to two communicating piers.

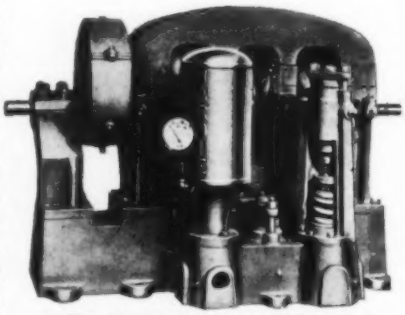
"Existing piers similar to Pier 54 should be made to conform to the recommended good practices of the National Board of Fire Underwriters . . . especially with respect to the installation of sprinklers, the construction of fire walls and fire bulkheads, fire hatch-



"Quality Fire Apparatus" is the slogan of Young Fire Equipment Corporation of Buffalo, New York. This beautiful hi-pressure truck built by Young for the Chili, N.Y. Fire Department is fitted with a Hardie High Pressure Pump.

● More and more is recognized the fact that Fog Fire Fighters bring quick, positive fire control and a new measure of security to isolated communities. The quick mobility, positive performance and economy of Fog Fire Fighters make such equipment a "must" today in metropolitan fire departments.

Hardie High Pressure Pumps are readily assembled into any truck design. They give unfailing high pressure and a long life of trouble-free performance. When you buy a Fog Fire Fighter specify a Hardie Pump and Hardie Fog Gun. Any equipment manufacturer will glady supply them. Write for data.



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High Pressure PUMPS AND FOG GUNS
for Fog Fire Fighters

ways and opening in the pier deck for revolving nozzles, cellar pipes, etc."

Specialists in fire prevention and protection familiar with the other piers of similar type in the area from 13th to 16th street, and in numerous other sections of the city's vast waterfront, predict this destruction will go on until these and other safety measures are taken.

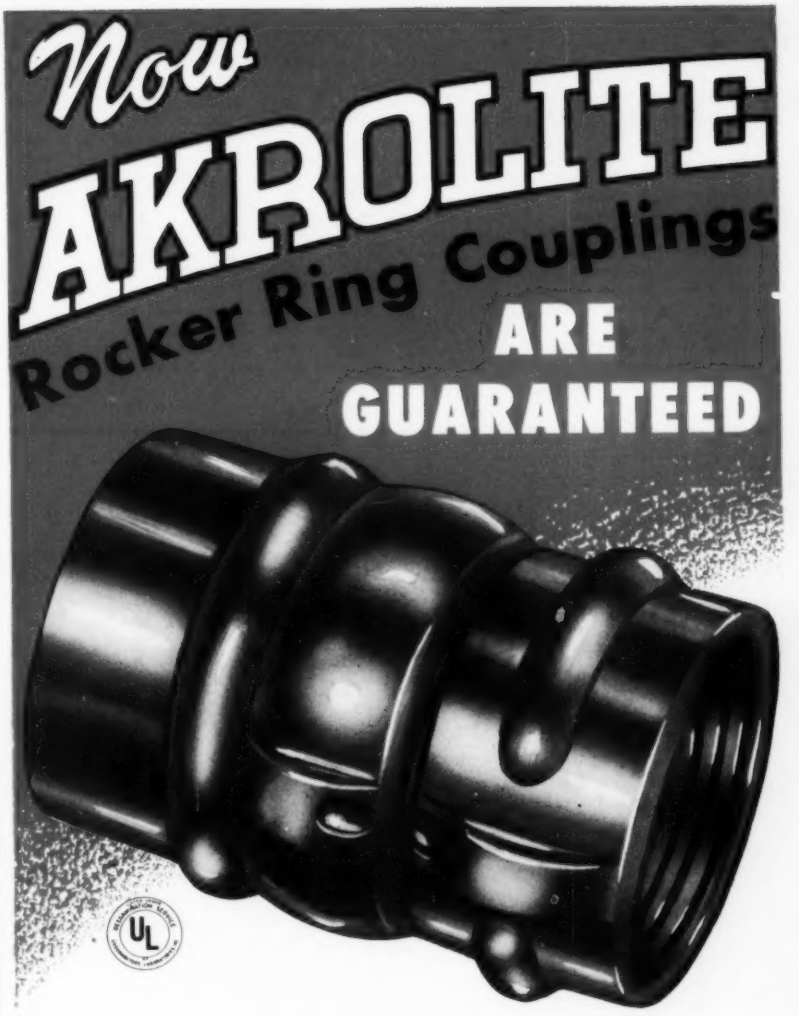
Why Berlin Suffered Heavy Fire Losses

(*Continued from page 728*)

other equipment, only looked at the fire from the street without helping. The former Kadettenaustalt (military school until 1918) which now served as the chief barracks of the Leibstandarte, though one of the buildings had caught fire, was out of danger owing to the prompt work of the barrack's own pumper. When arriving at the Lichterfelde church, I found a four-story apartment house entirely on fire which threatened to spread to the adjacent blocks and the church. On the other side of the church the attic of a three-story apartment house was burning. Connected to the street hydrant in front of the church was a military pumper with three hose lines, which tried to bring the two fires under control. Not far from here another hydrant supplied by the same water main was used by civilian fire fighters who tried to play a hydrant stream with damaged hose upon the parish hall and office which was entirely involved. As there was danger that the uselessly poured water from the hydrant stream would threaten the supply of the pumper, I shut off the supply of useless hydrant stream. Because of this one of the volunteer fire fighters became furious and had me arrested, as I was but a civilian. Though I might have been shot or imprisoned without a trial (following the AAR law), I succeeded in explaining to the police that I had done the right thing in protecting the water supply of the pumper.

After this experience I stepped across the destroyed and partly burning suburban streets to the district of Steglitz where the theatre had burned out that morning. Seeing a more important blaze in the direction of Friedenau, I left the theatre fire in order to get to the place of the conflagration, where I found quite a curious situation. A heavy bomb had wrecked the interior of a tenement block. The outside buildings were entirely involved by fire, which rapidly spread from one apartment to another. Though it was January and it was a rainy morning, the heat was so intense that parts of the adjacent streets could not be used. When I saw about twelve apartment houses on fire and neither civilian or regular firemen on hand, I hurried to the next post office in order to call for help from the fire brigade. Though the upper part of the post office was already ablaze, and the postmen were rescuing the mail, they allowed me to use the special telephone in order to get the central fire station in Berlin. After having tried for half an hour to get a phone connection without success, I gave up at last my endeavor, especially as a police patrol had arrived, the leader of which promised to apply for fire companies.

But within the next hour nothing happened, so that the fire continued to spread without being fought from any



Guarantee now in effect on AKROLITE COUPLINGS meets the Guarantee on the Fire Hose

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You should hear all the praises firemen sing, whose departments are equipped with Rocker Ring!

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side. When I asked the inhabitants and the policemen why the fire in the adjacent blocks was not fought at least by bucket brigades and hand pumps, I was told that there was no water even in the house faucets; people in these houses also were so unwilling to do extinguishing work that they had threatened to beat the AAR wardens who had tried to organize bucket brigades and hand pump squads in these blocks. When a first floor fire in a corner building spread to a grocer's store, in which at once several explosions occurred with a strong heat and high blue flames, I learned that the grocer, instead of distributing the Christmas whiskey and brandy rations in time to the population, had constantly denied that he had received the rations, which now caught fire in a furious way. Meanwhile I could observe how buses and trucks of the Red Cross were spreading to carry ill and disabled persons out of the conflagration zone, before their hospital was seared by the flames.

When at last, after about three hours, the first fire company arrived with a military trailer pump, it appeared that they did not carry hose enough with them to stretch a line from the nearest water pool to the location of the fire.

I continued my walk across the burning districts in the direction of Wilmersdorf. There I found, in the midst of a congested and crowded tenement block a five-story furniture plant entirely on fire, which was fought from the balconies and roofs of adjacent apartments by AAR wardens and housewives with buckets and small hand pumps. A few blocks away, an attic fire in a large dwelling had been fought and brought under control by two motorized military fire companies, probably because the house was inhabitated by some higher personage. When I asked the commanding officer why he did not send his companies to the fire in the furniture plant, he replied that he was not allowed to direct his apparatus to any fire without permission from headquarters.

In another wrecked block, the spreading of the fire was constantly supplied by gas escaping from a gas main, but this blaze was only fought by a handful of soldiers handling a too short hydrant stream. In the district of Schoneberg, I could not find a single pumper on duty; only one aerial ladder truck was on hand, trying to fight some smaller fires. After having looked to several more important blazes within my native town of Charlottenburg, I entered just at noon the burning city of Berlin. Coming to Lutzow Square, I met half a dozen pieces of apparatus coming from the 20 miles extended Beeskow county and having been summoned for aid to Berlin. Nearby at Magdeburg Square, a big market hall was completely burned out, the grocers and other merchants having lost all their property, but only complaining of having lost the ration tickets they had got for their goods.

Between Potsdamer Street and Berlin & Potsdam Railroad, due to the fact that a typical "bomb carpet" had been thrown upon this district by the RAF, fires were so intensive in these blocks that passengers could only cross the streets and courts under the protection of gas masks. Near a post office which was not damaged, about 300 firemen, policemen, soldiers and civilian volunteers had just brought a block fire under control in order to proceed to an entirely wrecked tenement house, the debris from which was burning on a basement shelter in which about fifty persons were without a chance of escape for about nine hours.

I proceeded to Potsdam Bridge which had been partly damaged and where, from a broken main for more than nine hours after the air raid, a thirty-foot fountain of water was shooting into the air, while the adjacent districts were without water. There was no emergency service on hand to shut off the pipe valves.

Near Potsdam Square, I could see dozens of large pumpers, hose wagons and ladder trucks waiting on the streets without a job, while in the immediate neighborhood, the well known AWAG (former A. Wertheim) central department store burned out.

Having proceeded by a still running line of the subway system to an entirely wrecked and burning district situated on the banks of the Spree near Friedrich, I was astonished not to find any fire boat in action, the Berlin Fire Brigade owning at that time six or seven regular boats equipped with portable motor pumps. When arriving at the former Kroll Opera House (where the Reichstag used to meet since the well known fire of 1933) I found it ablaze, but no fire company was on hand. As the night was coming and I had been moving from one fire to another for thirteen hours, my clothes half

The right of way ...right away!

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Powerful Buckeye
Exhaust Whistle

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The shrill, piercing signal of Buckeye whistles is a warning that always opens the right of way . . . *right away*. They operate on the exhaust. Further, these whistles are sold for use on *emergency cars only*. Standardize on Buckeye whistles and on *all* fire fighting equipment made by Buckeye for utmost efficiency and long life.

Buckeye
FIRE DEPARTMENT ACCESSORIES

BUCKEYE IRON AND BRASS WORKS • DAYTON 2, OHIO

burned and my shoes and socks water soaked, I decided to call it a day. Leaving Berlin the next morning by train, I could still see in the dusk of the morning the lights of several great fires which had been burning for about thirty hours.

From the Summer of 1944 to the Spring of 1945 we had the same kind of fires, and even conflagrations, caused by different air raids, and despite improved fire fighting facilities and appliances, were not able to check the damage caused by these raids.

Pacific Coast Chiefs

(*Continued from page* 730)

tional Board Grading Schedule"; Chief C. L. Bolz, Pasadena, Calif.: "Why I Started a Course in Applied Psychology"; Mr. John Rathmell, Pasadena: "Psychology, the Science of the Mind"; Chief C. J. Eisenbacher, Tacoma, Wash.: "The Service Aspect of Two-Way Radio in the Fire Service"; Chief Dwire Garrett, Sumner, Wash.; "What Ought to Be Done in Training Rural and Volunteer Fire Departments"; Chief J. T. Caldwell, Ellenburg, Wash.: "The Place of Auxiliary Fire Fighters in Cities of Less Than 30,000"; Chief W. K. Moore, Yakima, Wash.: "Annual Reports"; Mr. L. L. Burgunder, Deputy State Fire Marshal, Spokane: "What Volunteer and Rural Fire Fighters Expect from Their Membership in the Pacific Coast Association of Fire Chiefs"; and Mr. Fred Shepperd, Engineer-Manager, International Association of Fire Chiefs: "Public Address Systems as Fire Fighting Adjuncts."

Chiefs Hear "Secession Talk"

High point of the convention was an hour-long debate during the sessions of the 18th, of a motion offered by past president of the International Association of Fire Chiefs, Chief Arthur Baker, of Lewistown, Mont., that the Pacific Coast group secede from the International Association of Fire Chiefs.

The motion to leave the International organization was withdrawn by its proposers after discussion by the chiefs developed an overwhelming opposition to the idea. The newly-elected president of the International Association of Fire Chiefs, Chief Frank McAuliffe, of Chicago, who was present at the convention, received an ovation following the decision to remain with the International.

The motion to secede came in a session where chiefs of the Pacific Coast association scrapped a 20-year-old constitution, elected new officers and changed the name of their organization. Chief John Alderson, of Los Angeles, president of the Pacific Coast group, and a member of the board of Directors of the International Association, spoke strongly in favor of the latter organization and was given an "overwhelming vote of confidence." Immediately following this, Chief McAuliffe expressed the pleasure of his office over the decision of his west coast colleagues to cooperate to build a stronger International body.

The new officers of the Pacific Coast Association of Fire Chiefs are: L. C. Canning, Midvale, Utah, president; Chief William Meinheit, Berkeley, Calif., first vice-president; and Chief William

BUT **NO SNAKING OR WRITHING**

In every "Streamlined" Eureka Fire Hose, two special developments known as Balanced Weave and Controlled Curing eliminate dangerous twisting or serpentining under high pressure.

Long life and ruggedness have been engineered into Eureka, without sacrificing flexibility or adding excess weight. Every length is tested for burst resistance, elongation, warp and twist. An Oxygen Bomb Test proves the aging qualities of the lining, Eureka's exclusive Smooth Interior Filler Ply insures maximum pressure at the nozzle, and mildew is prevented by "Formula X."

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"For greater protection to life and property"

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Fitzgerald, Seattle, second vice-president, Chief Jay Stevens remains as secretary.

Among the several changes of policy in the new constitution adopted was the change in the Association's name to "Pacific Coast Inter-Mountain Association of Fire Chiefs."

Preceding the heated afternoon session, forty-seven "visiting firemen" paid a call on convention delegates, escorted by Spokane Captain Roy McDermott and Fireman William Hingston. The Forty-seven "chiefs" were actually school fire captains from public and parochial schools throughout the city. The youths, ranging from eight to fourteen years, had supervised the inspection of 20,000 homes last year.

Convention delegates closed their conclave with a banquet at the Hotel Davenport with Mayor Meehan, Chiefs Canning, Alderson and president McAuliffe of the I.A.F.C. heading the list of speakers.

California Fires

(*Continued from page* 731)

blaze, which did $10,000 damage, broke out several hours after the building had been emptied of a large quantity of dynamite prepared for shipment. Plant firemen and the San Pablo Fire Department extinguished the blaze.

Smoke from a raging brush fire between the Corte Madera and Greenbrae intersections of U. S. Highway 101 (Redwood Highway) shrouded the area and blocked traffic for two hours along three miles of the road. Eight Marin County Fire Department trucks and equipment from six Marin cities were used to extinguish the fire which swept 300 acres of swampland near Richardson Bay.

In Oakland, firemen fought a 40-acre grass fire near Mountain Boulevard and Seminary Avenue as other companies battled a 50-acre blaze a mile away at Ascot Drive and Mountain Gate Avenue in the hills back of Oakland. A ten-year-old boy and a nine-year-old girl were accused of starting one of the blazes while playing with matches.

Other brush fires burned over hundreds of acres near Redwood City on the San Francisco Peninsula, at the Restoni Ranch near the Marin and Sonoma Counties border and at a point between Lafayette and Walnut Creek in Alameda County.

In Madera County, more than 500 fire fighters battled a mountain blaze in the country between Yosemite and Kings Canyon National Parks.

Continued hot, dry weather following an abnormally dry rainy season has increased the hazards of the annual fire season in California to a dangerous degree.

"CENTRAL" HAS A RECORD FOR DEPENDABILITY

Front and rear views of Squad Car delivered to Monaca, Pennsylvania. Upon delivery of this unit we received an additional order for two 500-gallon Pumpers from this community.

There is a Central Fire Truck designed for every size Community and for every purpose.

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World Wide Fire News

By Roi B. Woolley

Fireboat Averts Serious Blaze

Philadelphia port authorities reported that fast work by a fireboat crew averted a major blaze on the city's watefront.

The fireboat J. Hampton Moore was called to the scene of a blaze aboard the 10,000-ton Greek freighter Antonis, while six other vessels rode at anchor nearby in the Delaware River. The fire started on the boat deck near bags of coal and threatened not only the Antonis, but the other nearby ships. Members of the crew fought the fire until firemen took over and succeded in extinguishing the blaze without serious damage. One seaman was injured.

The ship, which came from Rouen, France, was waiting to load coal and grain.

* * *

Blast Wrecks British Liner

An explosion of unexplained origin, said to have originated in the engine room of the British liner Reina del Pacifico, resulted in the death of 19 men and serious injuries to thirty-four others, while the 17,702-ton motorship was on a trial run after being refitted for peacetime service.

The possibility of sabotage was not ruled out, as officials clamped a censorship on news of the accident. The 17-year-old vessel, which voyaged hundreds of thousands of miles on war service without injury, sustained crippling damage, and was towed into Belfast, Ireland, by tugs summoned on an S. O. S. The injured, removed in lifeboats, were taken to hospitals in Bangor, Donaghadeel and Newtownards. News reports stated that only crewmen, technicians and a few officials of the Pacific Steam Navigation Com-

pany were aboard at the time of the explosion, which took place while the ship was about twelve miles north of the Copeland Islands.

* * *

Hot Off the News Ticker

British troops and German fire fighters in August, braved exploding mines in an effort to control raging forest fires, in the Reichswald, scene of bitter battle during World War II. The forest was reported ablaze over a twelve-mile area; the main fire is said to have started after several hundred German woodsmen, cutting timber for Netherland mines, had finished their work for the day. . . . Investigators in Tokyo blamed a cigarette butt for the 20,000,000 yen (one yen normally equals about 50 cents U. S. currency) fire which destroyed the Japanese Finance Ministry and most of its records, in September. . . . Naval warfare entered a new phase in September when the first shipboard firing of a 15-ton V-2 rocket was attempted on the carrier Midway, far out in the Atlantic Ocean. . . . The burning August sun caused serious forest fires in Europe, which devastated between 2,000 and 3,000 acres near Rouen, France, and areas on the Germany-Dutch border. . . . In Newton (Kan.) a Bazooka rocket exploded, killing three children and injuring five others, all members of the same family. The children's father, Arnold Schmidt, reported he had brought several "dud" rockets home from Fort Riley, as souvenirs. . . . In Hot Springs (Ark.) a 37-mm. shell, believed harmless and being used as a plaything, exploded, injuring six children, two seriously. One child dropped the shell, during play and the explosion resulted. . . . In Norwalk (Conn.) David Czako, local realtor, said he was preparing to go into the business of making atom-bomb shelters. Until the atom bomb—when and if—Mr. Czako said, the shelters could be used for cold storage. . . . In Washington (D. C.) when two switch engines collided a few blocks from the Capitol, the crash was mistaken for an explosion at the Capitol and fire department and police emergency units were rushed to the scene. One trainman was injured. . . . Because in the next total war the home front probably will be the combat front, every American community must have organized and disciplined civilian disaster agencies and under military direction, said Lieut. Gen. Hugh A. Drum. . . . The Army has introduced a new Jet-Bomber, big as a B-29, designed for super-speed. It has a wing spread of 116 feet and is 108 feet long, having two rocket motors near the tail for emergency bursts of power with four G. E.-built jet engines mounted in pairs under the wing sections. Fuel supply is a secret. . . . More than 100 forestry officials from ten Eastern states watched a demonstration of forest fire fighting equipment in Penn State Forest, near New Gretna (N. J.), in September. Main attraction was a tractor-pulled plow that can be carried in a plane and is capable of making a four-foot fire-breaking furrow. Another feature was a "brush buster" which cuts and grinds brush over a four-foot wide path. . . . Top British scientist Prof. N. F. Mott, warns Britain that the nation is doomed to destruction in any atomic war "unless it can remain neutral." Fifty of the atom bombs launched with V-2 weapons

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WITH THE MIGHTY PUNCH!

FOR FIRE HAZARDS THAT DO NOT DEMAND LARGER EQUIPMENT . . .

The new ANSUL 4 Dry Chemical Fire Extinguisher has fire stopping effectiveness far in excess of any other extinguisher of comparable size. Its compact size makes it ideal for locations where space is limited. The ANSUL 4 is easy to use . . . easy to recharge on-the-spot . . . and again ready to

STOP FIRE FASTER!

MADE BY THE MAKERS OF ANSUL-DUGAS DRY CHEMICAL FIRE EXTINGUISHERS, MODELS 20, 30, 150A AND 350A.

ANSUL CHEMICAL COMPANY
FIRE EXTINGUISHER DIVISION, MARINETTE, WISCONSIN

could kill a quarter of the population of London (8,700,000) and make the city uninhabitable", he said. . . . Six persons were killed and twelve injured in an explosion at a munitions factory at Lamarche-sur-Saone, Cote d'Or Department, central France in September. . . . In another blast in an army munitions dump in Alcala de Henares, suburb of Madrid, Spain, seventeen persons were killed and thirty-eight injured. Many were reported missing. The disaster was Spain's second within three weeks. . . . Four dead and four seriously injured was the toll as a resu't of the explosion of a gun-powder factory at Barcarena, near Lisbon, Portugal, also in September. . . . Final reports on the Rueil, France, Theatre fire were given as eighty-seven dead, thirty-six seriously injured and 150 slightly injured. . . .

* * *

Spanish Arsenal Blast

Between 500 and 1,000 persons were be ieved killed and thousands injured in a night-long series of torpedo and submarine mine explosions which devastated sections of the port city of Cadiz, Spain.

The Cadiz naval base and arsenal erupted in a gigantic blast at 9:30 P.M., touching off a chain reaction that exp'oded 1,000 submarine mines and 140 torpedoes. The Larrinaga and Echevarrieta shipyards were badly damaged and the San Severino and San Jose districts were devastated. An undetermined number of the 700 night workers at a torpedo factory were buried under debris, a large oil tanker under construction was wrecked; the City of Cadiz was left without water or light. Chaotic conditions reigned in the city of 87,000 during the night of terror.

More than 300 fires resulting from the blasts were reported extinguished in Cadiz. The explosions shook buildings in Sevilla and Huelva, more than 60 miles away. The disaster was reported the worst in modern Spain's history, surpassing that of the ship Cabo de Machichaco which blew up with a load of dynamite in Santander Harbor in 1893, causing 400 casualties.

Telegraph and telephone communications in Cadiz were severed; houses along the waterfront crumbled into the water, it was reported. The ministerial council adopted urgent relief measures to speed relief to the stricken area.

Later reports stated Cadiz was a "city in black, ravaged by blast and fire. . . . Probably not a single building escaped uninjured."

Questions and Answers

"True and False" Statements

To the Editor:

Are the following questions "True" or "False"?

1. Layers of fire foam are likely to be of shorter duration in fire extinguishing effect than are the wetting effects of other types of extinguishers.

2. The discharge from a fire foam extinguisher is a better conductor of electricity than is the stream from the soda and acid type of extinguisher.

3. Standpipes produce more friction loss than do hose lines inside a building. (Standpipe and hose are same size.) D. R.

Answer: The questions you submit will be answered in the order in which you have given them.

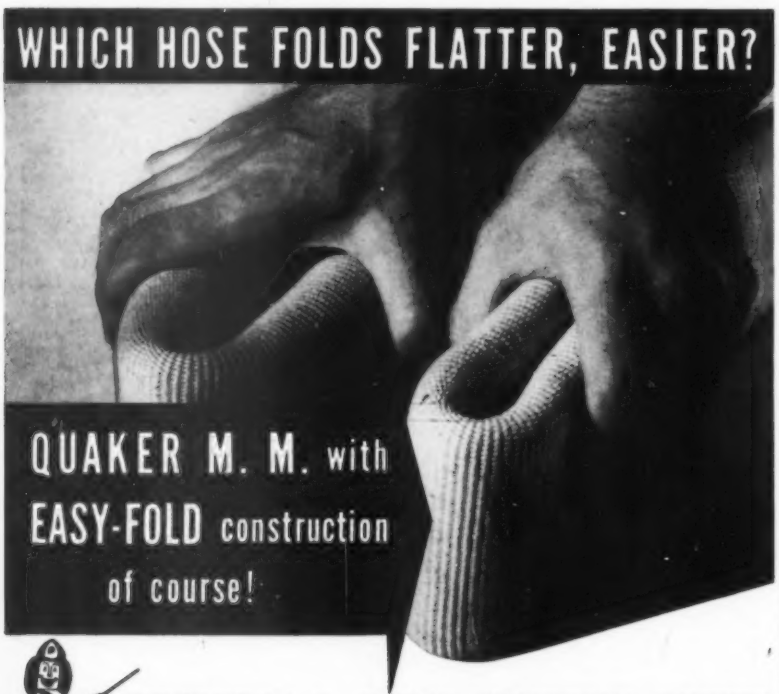
1. Specific data are needed in answering this question, i.e., are the layers of foam and extinguishing liquid of the same depth? Does each include the same quantity of liquid per unit of area covered? What type of foam is employed: chemical or mechanical?

As these data are not included, the logical procedure would be to assume that in each case the quantity of liquid per unit of area is the same. On the basis of this assumption the answer would be "False".

2. There are several facts which we must know before this question can be answered. The diameters of the streams, the consistency of the foam, whether slimy or dry; the type of foam (mechanical or chemical), the distance of nozzle to the point of electrical contact; and the quantity of excess soda or acid in the chemical extinguisher stream must first be known before an answer can be given.

We believe that the answer "True" would come nearer the correct answer than "False", but either answer could be contested on the basis of reasonable assumptions made by the candidate.

3. What are the lengths of hose and



PROVIDES ⅓ MORE FIGHTING POWER

With Quaker Modern Municipal Hose in Easy-fold construction, you can get 33% *extra footage* into truck beds because it folds flatly, packs compactly, handles easily, yet provides the rugged strength so necessary when fire strikes. That means ⅓ more fighting power to reach the high, out-of-the-way spots, quickly, without delay.

Carefully made by experts, Quaker Fire Hose stays pliable . . . resists abrasion and pressure. Special looms weave the tough multiple jackets for long-lasting service.

For greater security . . . greater economy, make sure it's Quaker Modern Municipal—the ideal hose for cities, communities, and industrial plants who want top dependability. Order a supply today . . . fires won't wait!

"If there's a way to get it done . . . Quaker will do it"

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pipelines? These figures must be known before the question can be answered either "True" or "False".

Deluge Set on Industrial Supply

To the Editor:

I had occasion the other day to use a deluge set at one of our manufacturing plants, using their water main size to combat a fire 110 feet in the air. The set-up was as follows: A 1,000-gallon engine using 2½-inch hard suction. Static pressure was 75 pounds. Three 100-foot lines of 2½-inch cotton rubber lined hose were discharging into a three-way inlet deluge set with a 1½-inch tip. The gauge engine pressure read 120 pounds. Gauge engine intake at the hydrant was 10 pounds. What was the nozzle pressure? What was the discharge? F. T. M.

Answer: The layout you give for the pumper supplying the deluge set is satisfactory, but apparently the water main to which the hydrant is attached has a very limited capacity.

With an inlet pressure of only 10 pounds at the hydrant intake, enough water would not flow by itself to supply the layout. A 1½-inch nozzle on the deluge set attached to three parallel 100-foot lines of 2½-inch hose, and with engine pressure of 120 pounds, would discharge 660 gallons per minute at a nozzle pressure of 98 pounds approximately.

Ten pounds pressure on a 2½-inch connection to the pump would not discharge into the pump this quantity of water, and it would have to be made up by the pump pulling a vacuum.

This could probably be done, but it is not good fire department practice.

Apparently the capacity of the main was exceeded.

Relative Capacities of Various Sized Hose

To the Editor:

I have had difficulty trying to determine, by figures, how a relation between carriers is determined, when carrying water.

The National Board of Fire Underwriters in Bulletin No. 62, dated August 15, 1948, describes these carriers as follows:

Three-quarter-inch hose: It would take 24 lines of such to carry the same quantity of water as one 2½-inch hose.

One-inch hose: It would take 11 lines to equal the 2½-inch line.

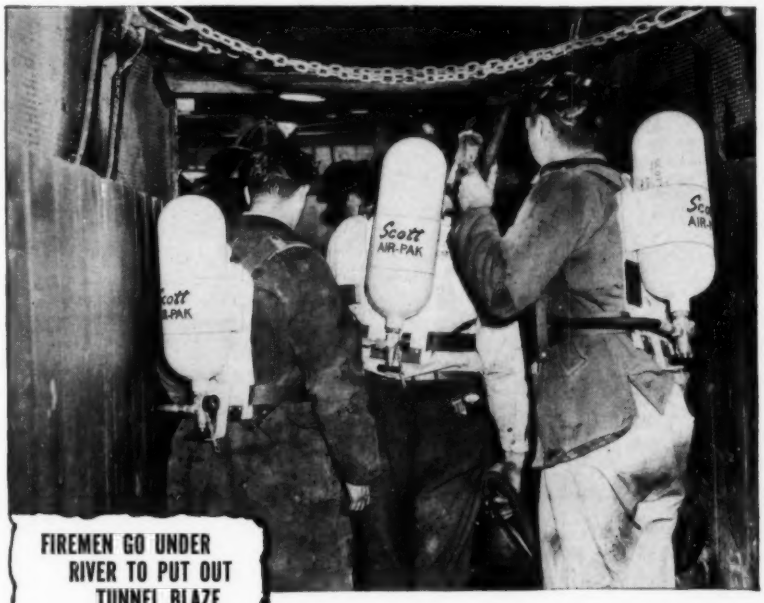
One and half-inch hose: Would be equal to 3.9 lines.

Three-inch hose: Would have 1.7 more carry.

Three and one-half-inch hose: Would have 2.6 more carry.

I have tried various methods of compounding figures and just can't arrive at these results. I would ap-

100 FEET BELOW SEA LEVEL



FIREMEN GO UNDER RIVER TO PUT OUT TUNNEL BLAZE

Thurs., May 15, 1947—The New York City Fire Department today met an emergency described as the first of its type ever fought.

In a scene reminiscent of a coal mine disaster, firemen successfully fought a stubborn fire in a tunnel 100 feet under the East River. It was put out without loss of life or serious injury by a squad of five firemen and a Captain, all wearing Scott Air-Paks.

Excerpt from New York Herald-Tribune

Scott Air-Pak DID THE TRICK!

- **Once again** the Scott Air-Pak contributed to a reduced fire loss, and with greatly reduced risk to fire-fighting personnel.
- **Once again** the Scott Air-Pak did a job that could not be accomplished with other breathing equipment.
- **Once again** it has been proved that the best breathing equipment is the equipment ready for *any* emergency.

The fact that Scott Air-Paks were available when this emergency occurred is indicative of the far-sightedness of New York Fire Department executives charged with the protection of life and property. The safety and efficiency of **your** firemen can be immensely increased by the use of Scott Air-Paks.

ONLY THE SCOTT AIR-PAK

- Can be used in any temperature from below zero to desert heat.
- **Only** the Scott delivers fresh, cool, confidence-inspiring air.
- **Only** the Scott has a cylinder gauge to prevent the inadvertent use of empty or partly empty cylinders.
- **Only** the Scott has acid-proof and corrosion-proof straps and fittings.
- **Only** the Scott has a battle-tested and emergency-proved Regulator.
- **Only** the Scott has a custom-built, not a commercial, gauge, within the wearer's vision.

The Scott Air-Pak has Bureau of Mines Approval No. 1308

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Breathe pure fresh AIR in every breathing hazard

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preciate your solution to the above and the method they used to determine these equalities. A. J. C.

Answer: Apparently the National Board used the following method for determining relationship between carriers:

A 1-inch hose at 20 gallons per minute has a friction loss of 12.3 pounds per hundred feet.

A 2½-inch hose carrying 220 gallons per minute has 12 pounds per 100 feet (approximately the same).

Thus for the same friction loss and through the same length of hose, it would take 11 1-inch lines to equal the one 2½-inch, as 220 ÷ 20 gives 11.

Likewise with 1½-inch hose. One and a half-inch hose at 60 gallons per minute has a friction loss of 13 pounds per hundred feet. Two and one-half-inch hose at 230 gallons per minute has a friction loss of 13 pounds per hundred feet.

230 ÷ 60 = 3.83, or 3.9. Thus the 2½-inch hose is equal to 3.9 lines of 1½-inch hose.

Three-inch hose at 380 gallons per minute has a friction loss of 12.8 pounds per hundred feet. Two and one-half-inch hose at 230 gallons a minute has 13 pounds friction loss per 100 feet.

380 ÷ 230 = 1.65, or 1.7 as much capacity for a given drop in pressure per hundred feet as has a 2½-inch hose.

Three and one-half-inch hose carrying 575 gallons per minute has a friction loss of 12.4 pounds per hundred feet.

Two and one-half-inch hose at 225 gallons per minute has 12.4 pounds friction loss per hundred feet.

575 ÷ 225 = 2.56, or 2.56 times as much capacity for the same pressure drop per 100 feet as has 2½-inch hose.

The ON WATCH FIRE ALARM

The On Watch Fire Alarm System is attached to the outside of a building. Detectors are placed in various parts of the building where fire is most apt to start. When the fire or heat comes in contact with the detector, the alarm goes into action on the outside of the building both audibly and visibly. Therefore, read the following recommendations:

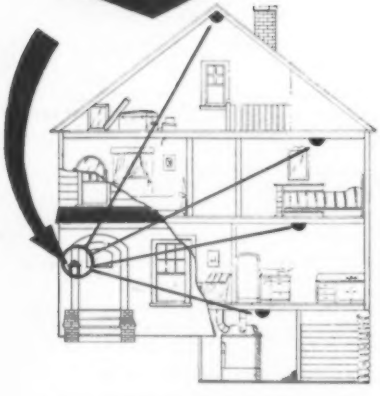
For a good Fire Prevention example, equip your own fire-house.

THE National Board of Fire Underwriters in their 1947 edition of the book entitled, "Suggested Fire Prevention Ordinance" on page 86, item 1901, stated, "That certain places shall be provided with an approved automatic heat-actuated alarm system connected to an outside gong or central station."

Fire Chief Walsh of New York City, on December 7, 1945, in a letter stated, "I shall accept an electrically operated thermostatic detection system that will provide a visible and audible warning on exterior of a building. This shall be accepted in lieu of more expensive alarm systems."

The On Watch System when properly installed by your own electrician will prevent a delayed alarm, for the system is always on watch.

Any further information will gladly be furnished. Inquiries invited from dealers and distributors.



Price $99.25 . . . F.O.B., N. Y. C.
(Including 3 Detectors)
Extra Detectors, $3.75 each

Immediate Delivery

O'LEARY'S FIRE PREVENTION CO., INC.
126 EAST 44th STREET - NEW YORK 17, N. Y.

Persons in the News

Brayton Made Director of Texas Firemen's Training School

Prof. H. R. Brayton has taken over the direction of the Texas Firemen's Training School, with the official title of Director.

Since 1929 the School, under Brayton's guidance, has conducted annual short courses at A. & M. College and one field instructor has traveled over the state, working with local departments. Also, for the past three years, three field instructors under the Industrial Extension Service have served various Texas communities.

Recently, the Advisory Board of the Training School, composed of four members from the College, voted to combine and coordinate these two training programs under the name Texas Firemen's Training School. The new year-round organization is set up as a department under the School of Engineering, Industrial Extension Service of Texas A. & M. College.

Director Brayton will work with the sixteen District Firemen's Associations of the State and will have five full time field instructors on the road to emphasize local firemanship training.

In addition, Mr. Brayton has been appointed by the Governor Chairman of Fire Fighting Service Sub-Committee of his Statewide Fire Prevention Committee to further fire prevention throughout the state.

Kehoe in N. Y. U. Safety Course

Edward J. Kehoe, Fire Marshal, Third Naval District, U. S. Navy, will direct the forthcoming courses in industrial safety and related subjects at the Center for Safety Education, Division of Education, New York University, New York City.

The courses cover two terms; the first dealing with industrial accident prevention will be held between September 24 and October 2. The second term, covering fire prevention and protection inspection, as well as related industrial safety subjects, will be held between February 4 and 10 inclusive, 1948.

Edward Kehoe succeeds Prof. William O'Connor as director of safety engineering courses at the Center for Safety Education. The latter will however continue his activities in other fields for the University.

Cardinal Made Fire Chief

Francis Cardinal Spellman, Catholic prelate, possessor of one red hat, in September figuratively received another.

In recognition of his "active courage in helping extinguish a fire in the Cardinal's house adjoining St. Patrick's Cathedral, New York City, on July 18 "he was named an honorary deputy chief of the New York Fire Department.

The ceremony, held at his residence, September 16, also included his appointment to membership in the Uniformed Firemen's Association, the Uniformed Fire Officers Association of Greater New York and the International Association of Fire Fighters. Fire Commissioner Frank J. Quayle presented the Cardinal with a hand extinguisher.

Cardinal Spellman is no newcomer to the fire service, having been made an honorary member of the Boston Fire Department several years ago by the then Chief, Samuel J. Pope, since retired.

Dr. Chapman Honored for Sixty-Five Years Service

Dr. C. W. Chapman, for sixty-five years a member of the Navada City, Calif., Fire Department, and Chief thereof at three different times, and a hale and hearty fire fighter at 85 years of

Dr. C. W. Chapman

age, was recently honored for his long service at a picnic in Navada City, with 300 in attendance, at which time he was presented with a gold fire badge.

The presentation was made by Fire Chief Cameron Larsen of Navada City. He was also the recipient of an honorary life membership in the Northern California Fire Chiefs Association, presented by Chief Thomas M. Lane of Alameda, Calif., and Chief V. P. Bartley of Crockett, Calif.

On the anniversary of his sixty-five years of service Dr. Chapman helped fight a seven-hour fire on Sugar Loaf Mountain. Asked at the time about his retirement plans, he replied "Not for twenty years more." He hopes to maintain his unique record of never having missed a fire, day or night, in all his sixty-five years active duty.

There are several other oldsters with the Navada City Fire Department (but which prides itself on its progressiveness) including Captain James H. Hutchinson who has had fifty-six years' service. The present chief is Ernest O. Young.

(Chief V. P. Bartley)

Comr. Wellington Retires

George Wellington, President of the Board of Fire Commissioners at Bridgeport, Conn., for the past fourteen and one-half years, resigned from that office,

Sure, it makes you mad!
A big fire . . . and you need lots of water and pressure. Tempers grow short when pumping equipment fails.
Why not replace your old pumper now, and be ready the next time you need water fast? Waterous Fire Pumps have earned an enviable reputation for dependability attained through outstanding design, backed by 61 years of manufacturing experience.
Compare the outstanding features and advantages of Waterous Fire Pumps . . . ask for copy of the illustrated Waterous Catalog. Colorful diagrams make it easy to see why Waterous pumps are standard equipment on so many leading makes of apparatus.
Also manufacturers of WATEROUS Fire Hydrants.
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SINCE 1886
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FIRE PUMPS
WATEROUS COMPANY · ST. PAUL, MINNESOTA

effective August 5. Mr. Wellington, a Department Manager at the Singer Company plant in Bridgeport, was first named a fire commissioner by Mayor Jasper McLevy in December, 1933, and was serving his 14th consecutive term as president of the fire commission, having been elected for more years than any of his predecessors in the annals of the Fire Department.

Soon after his appointment, Commissioner Wellington set out to renovate the firefighting equipment in the Bridgeport Fire Department, and replaced obsolete machinery by modern apparatus purchased through his insistence and belief that the Bridgeport Fire Department should rank with the best in comparable cities.

During his regime many changes were made for the betterment of the men in the Department. He advocated, and saw to it, that the "night watch," which kept one man on duty on the apparatus floor throughout the night, was eliminated. His successor is John J. Gillespie.

TOM MAGNER

Chief E. L. Chipman Retires

Fire Chief E. L. Chipman has resigned as head of the Greenville, Miss., Fire Department after forty-three years service, because of ill health.

The chief has long been active in state and regional fire service circles and is a member of the International Association of Fire Chiefs. He took over upon the retirement of the late Chief E. V. Donovan.

Succeeding Chief Chipman is Assistant Chief A. Z. Lokey, who has been a member of the department for twenty-seven years. Captain Paul Lawrence has been appointed to fill the post of Assistant Chief. He joined the department in 1925.

Chief Geller Joins Fire Control Institute

George Geller, former Division Chief of the New York Fire Department, has been made Director of the Fire Control Institute, 174 Fifth Avenue, New York City, a commercial fire prevention engineering service and personnel training service for industrial and business establishments.

Chief Geller left the New York Fire Department for active service in the Navy where his last assignment was as Officer-in-Charge, Fleet Fire Fighters School, Operation "Crossroads." VJ-Day found Chief Geller as fire marshal in charge at Pearl Harbor. Following his release from the Navy, he was engaged by the California State Hotel Association to make surveys and recommendations in connection with legislation having to do with State hotel hazards.

Appointments and Promotions

NEW BEDFORD, MASS.—Deputy Chief Milton C. Andrews named Chief, New Bedford Fire Department.

GRAFTON, W. VA.—John L. Proctor appointed Chief Grafton Volunteer Fire Department, succeding Louis H. Greenwald.

STEPHEN, MINN.—George W. Merdink elected Chief of local department.

SOUTH ENOLA, PA.—Edward Burke appointed Chief, Midway Fire Company, South Enola.

CHICO, CAL.—C. E. Tovee, who retired at 73 as chief of Chico Police, has become Chief of the local fire department.

DIXON, ILL.—Jake Johnson appointed Chief of the fire department.

MOODUS, CONN.—Joseph Pack elected Chief of the East Haddam Volunteer Fire Company.

GROVELAND, MASS.—Lloyd C. Boynton, a School Committeeman, named Chief Enginer, replacing Roger T. Shea who held the post 25 years.

BRADY LAKE, OHIO—William Harris appointed Fire Chief, replacing Ewald Andexler.

WEIRTON HEIGHTS, W. VA.—John A. Ferguson heads all the Greater Weirton fire units. Andrew Schwartz is Assistant Chief.

CASS LAKE, MINN.—Ed Ittner was made Chief of the Cass Lake Fire Department; Arnold Larson, who held the post for 20 years, has resigned.

RARITAN, N. J.—Joseph Liptak, formerly Assistant Chief, is now Chief of the Raritan Fire Department. He has been a member of the department for sixteen years.

BATAVIA, ILL.—Frederick C. Richter is the new Chief of the Batavia Fire Department. Former Chief William Thrum has resigned after thirty years of service.

DAMASCUS, OHIO — The Damascus Volunteer Fire Department, recently transformed into a non-profit organiza-

THE "Minute-man" PUMP FOR Fire PROTECTION

Like the "minute-man" of revolutionary days the sturdy "Dual Fire Fighter" stands ready for instant action in case of need.

In the country, at summer resorts, farm homes and rural districts the water supply to fight fires is often inaccessible to the large truck pumper.

The little "Dual Fire Fighter" can be easily carried by two men to the source of water where it quickly relays water to the pumper or, if necessary, fights fires direct.

An ideal pump for dewatering basements after a fire as it is not damaged by dirty water.

The Gorman-Rupp "Dual Fighter" will:

- Throw 100 gallons at 70 pounds or 80 gallons at 80 pounds at the pump.
- Deliver 170 gallons at 30 pounds to the pumper for two 1½ inch lines.

Powered with a dependable four cycle engine. Surprisingly low price.

Dual Fire Fighter

Complete information in our Bulletin FD-3.
Some territory open for live distributors.

THE GORMAN-RUPP COMPANY
BOWMAN STREET · MANSFIELD, OHIO

tion, has named D. T. Callahan as Chief.

HATFIELD, PA.—Allen Roth was elected Chief, Hatfield Fire Department.

DOUGLAS, ARIZ. — Paul Taylor took over as Chief of the Fire Department following resignation of Hugh A. Kelley, who held position seventeen years.

COTTAGE GROVE, CAL.—Orrin D. McAbee is the new full-time Fire Chief of the Cottage Grove Fire Department. He joined the organization in 1930.

HARLINGEN, TEX. — Henry D. Smith was named Chief of the Harlingen Fire Department succeeding J. J. Dawson, who became assistant city fire marshal. The Harlingen Volunteer Fire Department, however, named W. D. Coppin as Chief of the Volunteers. Thus there is a chief of the paid and of the volunteer organizations.

CLAY TWP., OHIO — Charles Stollsteimer elected Chief.

ROSEVILLE, CAL.—Assistant Fire Chief James A. Mascarini made acting-Chief of the local fire department.

WESTFIELD, MASS.—Herbert R. Thorpe named Acting Chief of the Westfield Fire Department in a surprise move by the Fire Commission. Chief William Clark will retire. A civil service examination will be held later.

DAVENPORT, IA.—Fred Swensen was advanced from Second to First Assistant Chief. Captain Walter Schroeder was promoted to Second Assistant from Captain.

REHOBOTH BEACH, DEL.—Louis J. McGillick was elected Assistant Chief to succeed Floyd Metzger, who resigned.

LAWRENCE, MASS.—Captains Thomas L. Delaney, Frank J. Regan and John T. Dineen of the Lawrence, Mass., Fire Department have been appointed Deputy Chiefs in the Department. They were three names high on the list, following the last civil service examination for the post. All three have come up from the ranks. Chief Dineen has been designated Second Deputy; Chief Delaney, Third Deputy; and Chief Regan, Fourth Deputy. Chief Dineen is also the Department Drillmaster.

The Chief of the Lawrence Fire Department is Edward A. Retelle. Timothy J. Keenan is First Deputy.

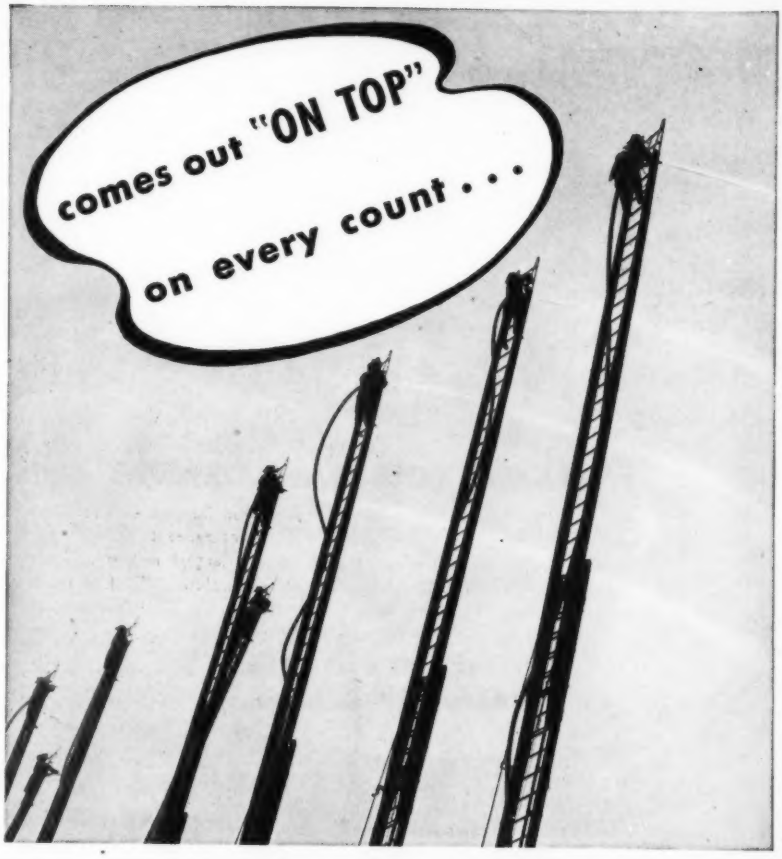
August Fire Losses Increase

Estimated losses by fire in the United States during the month of August totaled $51,359,000, an increase of 28.3 per cent over losses of $40,019,000, during the same month a year ago, it was announced by W. E. Mallalieu, General Manager of the National Board of Fire Underwriters. They were 4.1% higher than losses of $49,357.000 in July.

August losses brought the total fire destruction for the first 8 months of 1947 to $469,992,000, an increase of 24.2 per cent over losses of $378,323,000, for the first eight months of 1946. These losses for the first eight months of 1947 exceed the total U. S. fire loss for any single year from 1930 to 1945, inclusive.

Losses for the past 12 months ending August 31, 1947, set a new high record of $653,156,000. This is 22.7 per cent greater than losses of $532,111,000 for the 12 months ending August 31, 1946.

These estimated losses under fire insurance policies are on an incurred basis, including an allowance for unreported and uninsured losses.



Manhattan RADIO-ACTIVE TREATED Fire Hose

Get the hose with these 10 Points of Superiority:

1. The only radio-active treatment for cotton fabric.
2. Treatment renders hose permanently mildew-proof.
3. Treatment is moisture repellent.
4. Treatment is unaffected by water.
5. Treatment prevents hose freezing in winter.
6. Treatment will not sweat out and rub off.
7. Treatment preserves original hose strength, flexibility and durability.
8. Useful life of hose subject only to wear, or accident incident with use.
9. Treatment reduces maintenance cost by eliminating drying of jackets.
10. Flat folding, easy to handle.

Proof of the moisture repellent properties of Manhattan's patented Radio-Active Treatment lies in the following table of test results:

Six Weeks' Water Absorption Test on Competitive Makes of Treated Hose

Competitor	"A"	"B"	"C"	"D"	"E"
Percent Increase in Absorption over Manhattan Hose	51.5%	80.0%	73.0%	60.0%	48.0%

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Keep Ahead with Manhattan

MANHATTAN RUBBER DIVISION PASSAIC, NEW JERSEY

STERLING MODEL "M" GENERAL ALARM SIREN

STERLING

A NAME YOU CAN DEPEND ON

An absolutely dependable, tried and proven siren for communities of all sizes. Loud, clear, simple to install and no maintenance to bother with. Embodying the "know how" of the oldest and largest makers of siren signals in the fire field. Write for descriptive literature and list of towns using the model "M." Also . . . Manufacturers of a Complete Line of Apparatus Sirens.

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55 Allen Street, Rochester, New York

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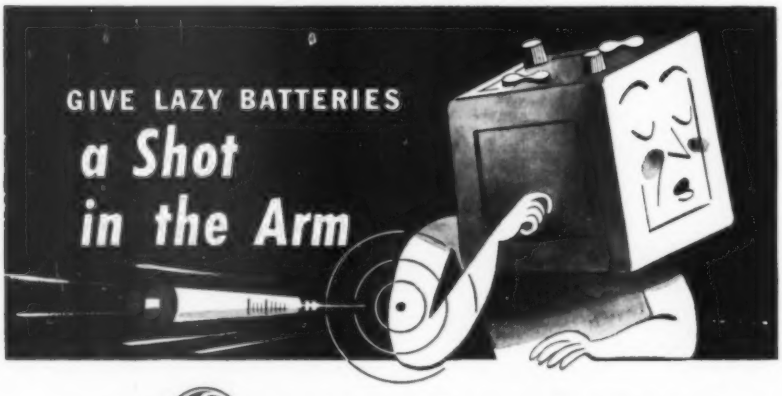
GIVE LAZY BATTERIES
a Shot
in the Arm



with a GE TUNGAR* CHARGER

Are *slow starts* spoiling your record for getting to fires fast? Maybe your fire truck batteries need extra pep—the kind they'll get from a Tungar charger. It's a heavy-duty rectifier that can charge one 6-volt battery at 6 amperes, two 6-volt batteries at 3-amperes, or a 12-volt battery at 3 amperes.

All you have to do is attach clips to the batteries, and give them a charge *right in the truck.* Make the charge while the truck is off duty, and watch it take off when you need it!

Ask us for further details. Write to Section A97-1035, General Electric Co., Bridgeport 2, Conn.

*Trade-mark Reg. U.S. Pat. Off.

GENERAL ELECTRIC

Manufacturers' Announcements

Hewitt Resumes Production of Maltese Cross Hose

Hewitt Rubber Division, Hewitt-Robins Inc., has announced the resumption in production of its top brand Maltese Cross fire and chemical hose after being withheld from manufacture during the war because of government restrictions on the use of premium quality materials.

J. H. Hayden, vice president in charge of sales, said the lifting of government restrictions and the availability of special long staple cotton necessary to produce the high tensile duck has enabled Hewitt to reinstate this prewar brand of hose.

A few of the features which contributed to the record of Maltese Cross fire hose through its half century of usage include:

Special long-staple, thin gauge, high-tensiled duck which makes the hose very light in weight, easily coiled, combined with high burst resistance; Special chemical treatment protects the duck against deterioration by mildew while the rubber cover eliminates the necessity of drying after use; High quality rubber tube and cover compounded to withstand oiling for long periods without cracking; Rubber cover protects the duck carcass from acid fumes and oil.

American-LaFrance-Foamite Broadens Its Activities

American-LaFrance-Foamite Corporation, Elmira, N. Y., has announced its entry into the field of parking meters, with a new type twin Automatic Parking Meter. Full-scale production of the new Alfco line will start December 15th.

The new product will be produced and marketed by a subsidiary of American-LaFrance-Foamite Corp., known as International Meters, Inc., 41 East 42nd Street, New York 17, N. Y.

Seagrave Strike Settled

The short strike of workmen against the Seagrave Corporation, Columbus, Ohio, was settled late in September, the men returning to work the 29th to resume full production.

New Magnesium Hose Bridge

A new use for a new metal in the fire service is disclosed with the announcement of a magnesium hose bridge shortly to be marketed by White Aircraft Corporation, Palmer, Mass.

The bridge weighs only seventeen and one-half pounds, is twenty-four inches wide, and it is said the device can be run over by a truck loaded with steel without any damage to it whatever.

In these days of increasing truck traffic, and more fires, and the need for keeping traffic moving, there would seem to be a particularly good field for such hose bridges.

Tri-State Firemen's League

The Tri-State Firemen's League, composed of volunteer companies of Southern Massachusetts, Northern Con-

necticut and Rhode Island, held their first annual meeting at the Lake Wallum State Reservation, in Douglas, Mass., on Sept. 28.

Most of the companies taking part formerly competed in hose coupling and ladder raising contests. However, in recent years they have given up this feature and have devoted their entire effort to practical demonstrations of fire fighting and first aid methods.

About twenty pieces of apparatus were demonstrated on the grounds, including crash trucks from the Quonset Naval Station, ladder trucks, various sizes of pumpers, rescue rigs, ambulances, forest fire equipment, tankers and a number of custom built vehicles incorporating special features.

Willard Hall, retired state forest warden of Chepachet, R. I., was general chairman, assisted by Myron Hatfield of Connecticut and Howard Hurley of the Massachusetts Department of Conservation.

H. T. HANSON

Correspondence

Orchids from a Master Mechanic

To the Editor:

Having read your editorial on maintenance bureaus (August, 1947 issue FIRE ENGINEERING), I want to express my appreciation of it. In so doing, it is my belief that I am expressing the opinion of many others in my position.

It is always the aim of this bureau to continually improve on all equipment for the safety, comfort and convenience of the operators and I believe much more could be accomplished by these bureaus if they were given proper recognition and consideration instead of being treated as orphans.

I always enjoy reading FIRE ENGINEERING and have gathered several good ideas from it. Again please accept my thanks for your good editorial and when you come to the west coast I would like for you to visit our shop.

A. A. WALLACE, Master Mechanic
Long Beach, Cal.

Editor: Other expressions of appreciation of the above mentioned editorial have been received from superintendents of maintenance and repairs, shop foremen and mechanics, all stressing the hope for closer, better working relations between fire department administration, operation and maintenance divisions of the fire service. To these conscientious readers, we say "thanks". And to Brother Wallace—we'll see you on our first trip to the coast.

Mere Youngsters?

To the Editor:

I have received the May, June and July (1947) issues of FIRE ENGINEERING and enclose subscription for another year.

I see that some of the chiefs have forty and more years (of fire service). I have a fire department near me where the chief and first and second assistant chiefs have over 120 years in the department.

The department is in Meridian, Miss. The men are Chief Pigford, 43 years; first assistant chief Worthen, 41 years! and second assistant chief Bishop, 40 years.

T. D. MAYES,
Chief, Philadelphia, Miss.

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FOR THE ENTIRE FIRE SERVICE.

Now at last, a fully automatic PROPORTIONER to be used with any WETTING AGENT.

ALADDIN'S scientifically designed proportioners are a revolutionary departure from the unsatisfactory methods now used to make "wet water."

With ALADDIN you can count on exact proportions when you need it, where you need it.

- ENDS TANK CORROSION
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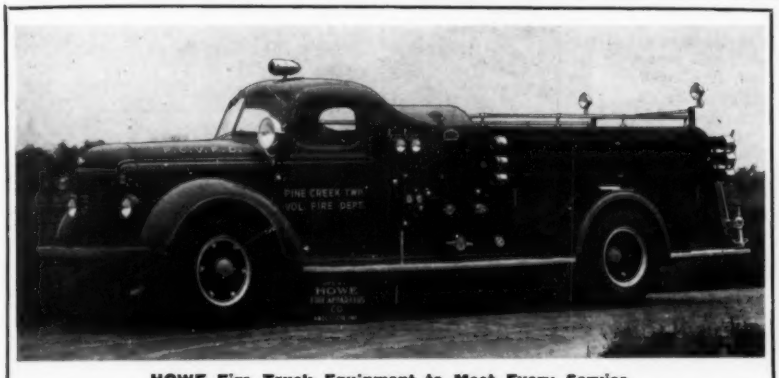


HOWE Fire Truck Equipment to Meet Every Service
Established 1872
HOWE FIRE APPARATUS COMPANY, 1402 West 22nd Street, Anderson, Indiana

OKLAHOMA CITY Goes CIRCUL-AIR

Twelve (12) new C-500 Circul-Air Hose Dryers have recently been delivered to the Oklahoma City Fire Department. They will be installed in 8 of the City's new Fire Stations, authorized, with other equipment, to completely modernize the Department under a $1,250,000 building and equipment program. Chief George R. McAlpine decided to eliminate hose towers and rack on all new stations after investigating the 8 Circul-Air units installed at Memphis, Tennessee.

CIRCUL-AIR THE AIR-CONDITIONING

FIRE HOSE DRYER

- √ Saves building costs — improves design.
- √ Dries hose in a few hours.
- √ Saves space — fits in any corner.
- √ Keeps all hose in service.
- √ Makes good hose last longer.
- √ Eliminates the hard work.

WRITE FOR FREE BOOKLET

New 24-page booklet shows illustrations and plans of smart, new, functionally designed fire stations. Needed by every Building Committee, Fire Chief and Fire Department Architect. Your free copy is now available.

Skyscraper Fire

(*Continued from page 733*)

getting above and below it to cut it off. Men who climbed 20 floors and more with heavy equipment were almost too exhausted to do any fire fighting. However, as rapidly as possible, standpipe streams were brought into play and the fire knocked down. Ladder companies were pressed into service with enginemen to man hose, as well as to break open elevator shaft doors to get at the smoky fire. Although no second alarm was sounded, the last-due Engine Company (No. 21) was special called to give a full assignment, as was Rescue No. 1.

Shortly after 5:00 P.M., firemen discovered a second blaze in the south bank of elevators on the 10th floor. This was quickly extinguished. Chief of Staff and Operations Frank Murphy took charge.

Fire loss was confined to the elevator system, but there was some smoke and water damage upon his arrival about 4:15 P.M.

Detroit Creates Valor Medal

The first medal for valor created by the Detroit Fire Department is inscribed in memory of Fire Commissioner C. Hayward Murphy and was pinned on Fm. Joseph J. Rosol of Ladder 13 by Comr. Murphy's widow at the Detroit Firemen's Fund games in the Briggs Stadium on August 17, in the presence of 50,000 Detroiters. The formal presentation of the medal was made by Fire Comr. James Mahon who succeeded Mr. Murphy on the Board when Mr. Murphy retired, due to failing health, in 1940.

The annual benefit for the smoke eaters was interrupted for a brief ceremony at home plate and attended by Chief Ninnian C. Higby; Bn. Chief Meade and members of the Murphy family. On March 13 last at 3.44 A.M. Fm. Rosol rescued a helpless 82-year-old woman whom he found unconscious between two beds in a second floor flat which was badly afire and heavily charged with smoke. He called for assistance and got it from Fm. Ricketts and Fm. Hojnacki, both of E. 33. The trio carried the woman to safety. She survived. Rickets and Hojnacki were awarded Certificates of Honorable Mention. All awards were made on recommendation of a committee of disinterested Detroit newspaper men who cover City Hall—Wallace Hershon, "The News"; James Inglis, "The Times," and Charles Weber, "Free Press." They selected Fm. Rosol's performance from among several others for the year.

JERRY DALY.

Congress to Legislate on Flammable Textiles

When Congress reconvenes in January, Representative Leroy Johnson (Rep., Calif.) will introduce new textile flammability legislation closing the doors to interstate commerce on shipments of highly combustible apparel and piece goods, the latter when not specifically designated for non-apparel use.

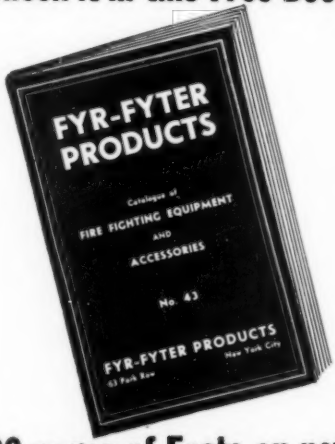
Only those articles, when highly combustible and not permanently flame-

PROTECTS against heat, cold, sparks, wind, debris, water, chemicals, etc.

SAFTI-SHIELD*

**Pat. No. 2421427.* The sensational new safety device! Plexiglas and aluminum; 14 ounces. Easily attached to any helmet. Crystal-clear, shatter-proof, fog-proof, war-tested. Write NOW for name of your nearest distributor! Distributor inquiries invited. FIREMEN'S SAFTI-SHIELD CO., Inc., 310 Waynesville Ave., Asheville, N. C.

Before you buy — Check it in this Free Book



96 pages of Facts on new Fire Fighting Equipment

We have in stock for immediate shipment:

- globe coats
- regulation boots
- regulation coats

All new stock—not war surplus. Order now. Write at once for free catalogue. Dept. F-E.

FYR-FYTER PRODUCTS
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proofed would be banned for interstate commerce under the proposed bill, a revision of HR 601, the measure introduced during the last session of Congress by Mr. Johnson.

The revised bill, a spokesman for Mr. Johnson has reported, would permit shipment in interstate commerce of the following:

1. All fabrics not designed for or used in manufacture of apparel;
2. Individual shipments of any fabric designed exclusively for purposes other than articles for personal wear; and
3. Shipments of fabrics to destinations where they will be processed or finished to meet the bill's requirements.

Shipments of highly combustible fabrics permitted under the act—and these include industrial fabrics and piece goods not designed or destined for use in clothing—must be clearly marked on the outside to show the fabric to be highly combustible, the ultimate use of the fabric or purpose of the shipment, and the number, title and section of the act under which shipment is made.

The same information is required on bills of lading covering the shipment and any other shipping manifests.

The revision will retain the original enforcement provisions of RH 601 as a "simple bill, which * * * proceedings to halt violation of the law and fines and imprisonment. The law would become effective one year after enactment.

Mr. Johnson characterizes HR 601 as a "simple bill, which . . . will administer itself and effectively eliminate, at a very nominal cost to the Government, these dangerous fabrics." He contrasts it with the Arnold-Capehart measure, "a sort of NRA bill, which would be administered by the industry through the Federal Trade Commission. This means," he says, "that the industry would try to police itself by agreeing on the standard to be applied to test the combustibility of fabrics."

The textile trade is now engaged in a cooperative research effort to arrive at a suitable standard and testing device for textile flammability.

Fatal Texas City Tanker Blast Causes Panic

Firemen and policemen of Texas City, Texas, know what explosion, fire, and panic are. Since last April's disaster, which cost the lives of more than 700, there have been five major oil refinery fires and two ship fires at Texas City. The climax came about midnight, September 25, when a turbine blast killed the third assistant engineer of the "Cedar Mountain," a diesel-powered tanker, at the Pan-American docks and started a fire which resulted in a battle between excited crew members, and Texas City fire fighters and law-enforcement officers.

The tanker had docked the day before to take on fuel oil and was in ballast at the time of the blast, which came at 11:27 P.M. from an undetermined cause. The stern, engine room and crew's quarters were wrecked and fire ensued.

Firemen, under Chief Fred Dowdy, a survivor of the April catastrophe, said that members of the tanker's crew became panicky and unruly and interfered with firemen fighting the fire. He had to call police to help control the excited crewmen. One member was jailed for refusing to get off the ship. Several members of the crew suffered

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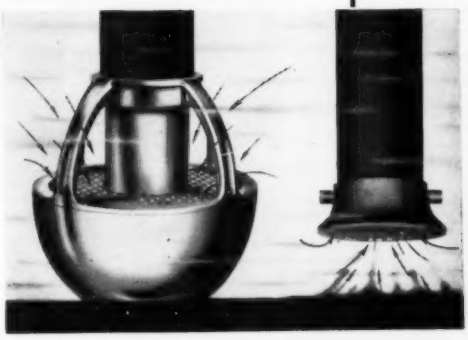


It's new!

It's different!

the new FILTER-FLO — *the old way*

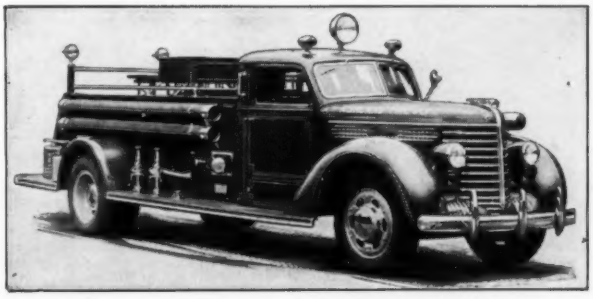
Adds years to fire pump life—Eliminates Clogged Hose Nozzles—Keeps Sand and Gravel out of your pump—Keeps Weeds and Marine Life out of hose lines—Sturdy—Dependable—Attractive—Made of Polished Aluminum. Filters the water twice before it can enter the hose—When in a vertical position it takes water only from the cleanest part of the stream.

SHEREN FIRE EQUIPMENT CO. Mason, Mich.

If your fire equipment dealer cannot supply you order direct. Specify size of suction hose and threads per inch.

FILTER-FLO is the new streamlined liteweight Suction Strainer Filter

Champion Fire Apparatus



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Above Tapping Sleeve and Valve are used to tap a main under pressure for a branch to automatic sprinklers, fire hydrants, etc. Cut-in may be made without interrupting water service.

VALVES: A. W. W. A. types, iron body, bronze mounted with double-disc parallel seat or solid wedge type. Non-rising stem, outside screw and yoke; or, with sliding stem and lever. Also furnished hydraulically operated. Square bottom type operates in any position. All are rugged and dependable, made of best material with highest quality workmanship.

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Underwriters Approved

We manufacture A.W.W.A. standard hydrants and also Mill Yard Hydrant shown at right, the latter giving individual control of each outlet. Dry top, revolving head, easy to lubricate, high efficiency because barrel diameter not reduced and no working parts or obstructions in waterway. Special Traffic Model A.W.W.A. hydrant designed to yield at ground line under impact.

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cuts and bruises during the fracas but none required hospital treatment. Chief Dowdy himself was slightly injured: he was in the engine room when the ship's automatic fire fighting system, which had not been working, went off. The discharge of the system's carbon dioxide drove the chief out and, in retreating, he stumbled, receiving lacerations. He returned after treatment at Danforth Hospital, however, to lead his men.

The fire was confined to the tanker, the damage being undetermined. The ship must go into dry dock. In connection with the blast, an interesting sidelight was given by Acting Police Chief J. G. McKee. He said, "When the fire department responded to the alarm, there was no rush of people to the waterfront this time." They, no doubt, recalled what happened to those who made that mistake in connection with the "Grand Camp" explosion.

Successful Indiana Chiefs Meeting

Reported to be the most successful convention in its history, the Indiana Fire Chiefs Association met September 10-12 in Evansville, Ind., with headquarters at the Hotel McCurdy.

The new officers elected for 1948 are Chiefs: William Koerner, Lafayette, President; Rollie Wilson, Marion, First Vice President; Charles Sensmeier, Evansville, Second Vice President; and George Hanen, New Albany, Treasurer. Robert F. Hamm, of Indianapolis, succeeds retiring Chief Archie McCabe as Secretary and Chief Fred W. Goeglein, Past-President, Fort Wayne, was named Chairman of the Board. Frank L. Orr continues as Business Manager.

Chief Frank McAuliffe, newly-elected President of the International Association of Fire Chiefs, appeared on the program and spoke on the subject, "Co-operation of State Associations with the International."

The Indiana Fire Chiefs Association, which was organized in 1926, has the enviable reputation of being one of the most progressive state-fire chiefs organizations in the country.

Correction

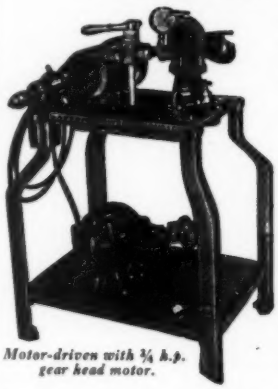
On page 653 of the September issue of FIRE ENGINEERING, in the roster of Associated Members who attended the August Conference of the International Association of Fire Chiefs in New York City, H. O. Meier is listed as representing the Eureka Fire Hose Division of the U. S. Rubber Company. This is in error, as Mr. Meier is sales representative of the Quaker Rubber Corporation, Philadelphia, Pa., makers of the well-known Quaker brand of municipal fire hose. Our apologies, Mr. Meier!—Editor.

No. California Chiefs to Meet

The Northern California Fire Chiefs Association will hold its annual convention November 1-3. Headquarters will be at the East Vallejo Fire Department. The host Chief is Chief Meredith R. Smith, East Vallejo. Battalion Chief Frank J. Sandy, of Oakland, is Treasurer of the Association.

(VICTOR P. BARTLEY)

FOR THE PROPER CARE OF YOUR FIRE HOSE
DAYTON POWERDRAULIC EXPANDER



Motor-driven with ¾ h.p. gear head motor.

★ Expands couplings from ¾" to 6" size.

Tests hose up to 700 lbs.

Extra attachment removes old expansion rings from old couplings. No manual effort needed.

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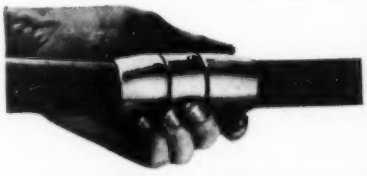

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Accurately Machined
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"ON THE ENDS—IN THE END"
IT'S BAR-WAYS

BAR-WAY MFG. CO.
STAMFORD • CONNECTICUT

Convention Dates

Oct. 21-23—NEBRASKA STATE VOLUNTEER FIREMEN'S ASSOCIATION. Annual meeting, Grand Island, Neb. Secretary-treasurer, R. D. Salak, P. O. Box 312, Schuyler, Neb.

Oct. 23-25—OHIO FIRE CHIEFS ASSOCIATION. Annual meeting, Lima, Ohio. Secretary, William H. Rosche, Asst. Chief, Fire Department, Canton 2, Ohio.

Nov. 1-3—NORTHERN CALIFORNIA FIRE CHIEFS ASSOCIATION. Annual meeting, East Vallejo, Cal. Treasurer, Batt. Chief M. R. Smith, Fire Headquarters, Oakland, Cal.

Nov. 3-4—SOUTHWESTERN ASSOCIATION OF FIRE CHIEFS. Annual meeting, Huckins Hotel, Oklahoma City, Okla. Secretary-treasurer, Chief G. R. McAlpine, Fire Headquarters, Oklahoma City, Okla.

What's Burning

THE following list includes fires of $10,000 loss and over in the United States and Canada for the month of September, 1947.

Month Ending September 30, 1947

Los Angeles, Cal.—Union Avenue Grammar School, destroyed.

Woodland, Wash.—Colvin Hotel destroyed. Cigarette.

Seattle, Wash.—Diamond Horseshoe Tavern destroyed. Cigarette.

Antioch, Ill.—Barn of George Yionen, three miles south, Lake County, destroyed. Spontaneous ignition.

Weldon, Ia.—Campbell drug store and grocery of Harold Percy damaged.

Lexington, Ky.—Savage Lumber & Mfg. Co. destroyed.

Lexington, Ky.—Whse. of L. M. Winges Co. destroyed.

Mather, Man.—Hardware whse. of William Taylor garage and home of Ed Jensen; general store of K. S. Hoard; combined post office and dwelling of R. McIntyre; and garage of C. E. Thordy, destroyed.

Long Beach, Cal.—Wax products factory, damaged. Candle.

Cedar Rapids, Ia.—Sinclair Memorial Chapel, Coe College campus, destroyed.

Georgetown, Ky.—Home Ice & Dairy Co. plt. destroyed.

Easton, Md.—Old Easton shirt factory bldg., occupied by paint shop of Ira Parris and furniture store and whse. of Ira Sewell, damaged.

Cuba, Mo.—Fourteen freight cars of St. Louis bound St. Louis-San Francisco Railroad freight train, five miles west, destroyed. Overheated journal box.

Riverhead, L. I., N. Y.—Whse. and duck feed mfg. plt. of Cooperative Grange League and Federation Service, Inc., destroyed.

Philadelphia, Pa.—Bldg. occupied by St. Moritz Clothing Co., Ventnor Sweater and Sportswear Co., and showrooms and storage rooms, damaged.

Sanford, N. C.—Sanford Milling Co. plt. damaged.

Dallas, Tex.—Seven administration and two other bldgs., Lou Foote Airport, destroyed. Fire started in cafeteria.

Campbell, Cal.—Winchester Lumber Co. damaged.

Hanford, Cal.—Valley Dehydrator Co. plt., southwest city limits, destroyed.

Riverdale, Cal.—Drill rig and oil well destroyed.

Moncton, N. B.—Roman Catholic Church of Our Lady of Perpetual Help, Georgetown, damaged.

Aylmer, Ont.—Plt. of Aylmer Packers, Ltd., destroyed.

Auburn, Me.—Junk yd. of Isaac Miller Co., river front, destroyed.

Cedarhurst, Md.—Rag whse. of Congoleum-Nairn Co., damaged. Spontaneous ignition.

Tulsa, Okla.—Portion of airport, destroyed.

Delta, Utah—Alfalfa seed whse. and cleaning plt. of Utah Poultry Producers Assn., damaged.

Wheeling, W. Va.—Two silos on dairy farm of Henry J. Miller, Short Creek, near Wheeling-Ohio County line airport, destroyed.

Pico, Cal.—San Gabriel River Bridge destroyed.

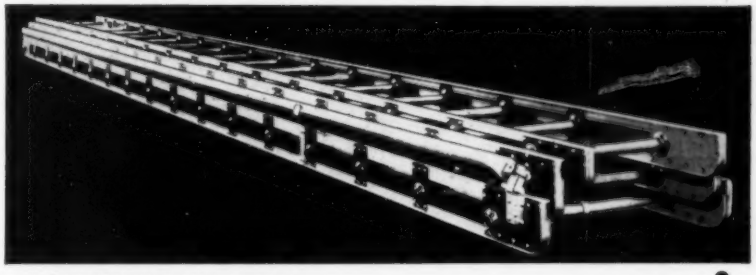
Kingman, Ariz.—Babbitt Bros. Trading Co.; dress shop of Dick Broden; and fountain lunch firm of Dick Long, damaged.

Orlando, Fla.—Orlando plt. of Atlantic Chemical Co. destroyed.

Atlanta, Ga.—Five-story brick whse. occupied by Peaslee-Gaulbert Corp. and subsidiary, Wright Co., Inc., destroyed.

Chester, Ga.—Cotton bagging whse. of Jack

FIREMEN PREFER...
Aluminum FIRE LADDERS



ALUMINUM IS LIGHT

When time is precious and manpower is at a premium, light-weight Aluminum Ladders are your most efficient life-saving and fire-fighting tools for they require fewer firemen to raise and operate them successfully.

ALUMINUM IS STRONG

Available in 1, 2, 3 and 4-section models, every Aluminum Ladder is heavily riveted and constructed of high-tensile-strength Aluminum Alloy. The corrugated rungs are securely fastened with aluminum expansion bushings, with the result that the rungs never become loose or break off.

ALUMINUM IS DURABLE

Practically all of the ALUMINUM FIRE LADDERS purchased since 1936 are still in use today. Being fireproof and rust proof they last longer than other types. Write for Complete Information.

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A Complete LINE OF FIRE DEPARTMENT ELECTRIC PLANTS

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THE BEST BADGE MONEY CAN BUY

BRAXMAR BADGES STANDARD WITH FIREMEN FOR 67 YEARS—WE CAN NOW SUPPLY NICKEL AND CHROME.

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Burch destroyed; genl. store of J. R. Hinson destroyed.
Glen Ellyn, Ill.—NU Way Laundry destroyed.
Crown Point, Ind.—Barn, cattle barn and silo on farm of Edwin Gutsman, damaged.
Des Moines, Ia.—Three story bldg. housing Iowa Pipe & Tile Co. destroyed. Lightning.
Fredericton, N. B.—Plt. of Devson Lumber Co. planing and resawmill destroyed.
Havre De Grace, Md.—Joseph L. Davis American Legion Post Memorial Home destroyed.
Charleston, N. S.—Plt. of Nova Scotia Wood Pulp & Paper Co. destroyed.
Merced, Cal.—LeGrand Elevator, east, owned by co-operative, damaged.
Cambridge, Mass.—Bldg. occupied by Inman Social Club damaged; also Raymond Churchill, caterer, damaged.
Downingtown, Pa.—Tire recapping plant of Field Tire Co. destroyed; also adj. fed mill damaged.
Alpine, Tex.—J. C. Penney main store and whse., liquor store of Otis Coggins and whse. of Shirley Scales, damaged.
Ballinger, Tex.—Higginbotham Bros. dept. store damaged.
Elsa, Tex.—F. H. Vehlsin, Inc., tomato packing plt. damaged.
Egg Harbor, Wis.—Garage of Herman Birnschien destroyed. Two dwellings and barber shop damaged.
New York, N. Y.—Grace Line's Pier 57, foot of 15th Street, Hudson River, destroyed.
Los Angeles, Cal.—Old Los Angeles Breakfast Club bldg. destroyed.
Oakland, Cal.—Oakland Airport damaged.
San Jose, Cal.—Pine Hotel damaged.
Key West, Fla.—Sugalola night club destroyed.
Nashua, N. H.—Century-old Park Theatre Bldg. housing the Park Theatre, Nashua hardware store and Berg shoe store.
Montauk Point, L. I., N. Y.—Fishing boat "Hiwai," a converted Navy submarine chaser, damaged.
Nelscott, Ore.—Mobile gas station equip. destroyed. Lightning.
Vancouver, Wash.—Ecklund Food locker plt. destroyed.
Oakland, Cal.—American Casket Co. and Central Rug Cleaners destroyed.
Americus, Ga.—American Provision Co. plt. destroyed.
Old Towne, Me.—Cutler Block occupied by womens' clothing shop of owner, drug store, fruit store and several offices, damaged.
Atlanta, Ga.—Riverside Pharmacy, Stephens Grill and Buschman's grocery store destroyed; also Bennet dept. store, damaged.
Clovis, N. M.—Mesa Theatre destroyed.
Inlet, N. Y.—Gaiety motion picture theatre destroyed. Overheated wood-burning stove.
Springfield, Ohio—Springfield Coffin & Casket Co. destroyed.
Houston, Tex.—Two hangars at Minor Stewart Airport, south, damaged.
Freeburg, Ill.—Three coal storage bins at United Electric Co.'s Red Ray mine, a strip mine operation, two miles south, destroyed; another coal bin damaged.
San Antonio, Tex.—Whse. of Russell & Butler Salvage Co., occupying grandstand of old Alamo Downs racing strip, 10 miles south, destroyed.
Tuscon, Ariz.—James A. Dick food storehouse, destroyed.
Waterbury, Conn.—Scovill Mfg. Co., a brass fabricating firm, damaged.
Memphis, Tenn.—Mansion of Ada Norfleet Fuller damaged. Short circuit.
St. John, N. B.—Three dwellings and whse. of McCormack & Zatzman, Ltd., destroyed.
Hamilton, Ont.—Hamilton Potteries damaged.
Atlanta, Ga.—New York Stock House, Inc., damaged.
LaGrange, Ga.—Millwork shop and planing mill of Daniel Lumber Co. destroyed.
East St. Louis, Ill.—Goedde Lumber Co. destroyed.
Pontiac, Mich.—Whse. of B. W. Donalson Lumber Co. destroyed.
Hampton, N. J.—Two barns and outbuilding on dairy farm of Elmer Sigler, destroyed. Spontaneous combustion.
Warren, Ohio—The Air Reduction Sales Co. destroyed.
McMinnville, Tenn.—Park Theatre operated by Cumberland Amusement Co. damaged. Crouch Drug Store damaged; Servall Restaurant also damaged.
Vancouver, B. C.—Garvin Ice & Fuel Co. and Sun Coal Co. damaged.
Decatur, Ill.—Decatur Dry Goods Co. damaged.
Granite City, Ill.—United States Engineers Depot damaged.
Toledo, Ohio—Three story brick bldg, occupied by Richman Bros. Co. destroyed; Florsheim Shoe Shop damaged; R. R. Baker Co. damaged.
The Dalles, Ore.—The Dalles Lumber Co., two whses., destroyed.
Rainier, Ore.—Hodgen-Brewister Co. docks, whses., grain destroyed.
Sacramento, Cal.—Character Slipper Factory destroyed. Also A. E. Erickson planing mill damaged.

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REG. U.S. PAT. OFF.
FIREMAN UNIFORM CAPS

Union Made **Prompt Delivery**

Wentworth Fireman Caps are made of the Highest Quality Standard Materials available. They are made in all the New and Standard styles by the Best Skilled Union Craftsmen. Over 50 years of experience and skilled workmanship guarantees you AMERICA'S GREATEST CAP VALUE in all WENTWORTH FIREMAN CAPS.

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Any fireman can have a catalog by writing—

BODY-GUARD MANUFACTURING CO.
ST. JOSEPH **MISSOURI**

Kingston, Ont.—Students Union bldg., Queens University, destroyed.
Joiner, Ark.—Cafe of Leon Chamberlain; sandwich shop of Ora Bailey; radio shop of James Mythemia; Koonce furniture and hardware store; and barber shop of Joe Dean; destroyed. Also, dry goods store of J. S. Evensky and fruit stand of Aubrey Faulk damaged.
Richmond, Ont.—Laurentian flax mill destroyed. Lightning.
Montreal, Que.—Bldg. of Canadian Lift Truck Co. destroyed.
Grants Pass, Ore.—Weston hop kiln destroyed.
Portland, Ore.—Portland Gas & Coke Co. plt. damaged. Explosion.
Hughsonville, N. Y.—Two and one-half story brick fire station, and a fire truck, destroyed.
Vancouver, B. C.—Alberta Meat Co.'s plt., Lulu Island, destroyed.
Valdez, Alaska—First bank of Valdez, Gilson's Mercantile, Seattle hotel destroyed.
Portland, Ore.—Fishel's Venetian Blinds Co. damaged.
Three Rivers, Que.—Whse. of J. C. Malone & Co. destroyed.
Redding, Cal.—Shasta Box Co. destroyed; Also 7,000,000 feet lumber and two dwellings and slaughter house damaged. Grass fire.
Yakima, Wash.—Central Grocery Co. whse. damaged.
Easton, Pa.—Bldg. and lumber of William B. Eisenhardt Cabinet Wks., one mile north, destroyed.
Gary, Ind.—Three bldgs. of Gary Screw & Bolt Co. destroyed.
Monroe, La.—Hangar and nineteen airplanes at Monroe Municipal Airport, leased by Northeast Aviation Co., destroyed.
Oklahoma City, Okla.—Sooner Plating Co. whse. damaged.
Wethersfield, Conn.—Whse. and garage of Gra-Rock Ginger Ale Co. bottle plt., damaged.
Medway, Mass.—Two barns of Michael A. Snygay, Overlook Farm, destroyed. Cigarette.
Penobscott, Maine—Richland Peat Plt. Co. damaged. Spark from tractor.
Portland, Ore.—East Side Cleaning Dye Works destroyed.
St. Sauveur, Que.—Bldg., occupied by Simmonds Products Factory and apt., destroyed.
Martinez, Cal.—Mountain Copper Co., destroyed.
San Francisco, Cal.—State Battery Co. factory, destroyed.
Stockton, Cal.—Plt. of Central California Poultry Producers damaged.
Kansas City, Mo.—Old Sni-a-Bar Gardens destroyed.
Houston, Tex.—Samuel Hart galleries, combination antique and current furniture store, destroyed.
Albany, Wis.—Two bldgs. occupied by Krostue Implement Co. and bldg. occupied by grocery store of Alvin Miller, damaged.

The Round Table

(*Continued from page 736*)

thereon, because the dump is isolated and the fires burns continuously.

C. A. Cunningham, Chief, St. John, N. B.: Open garbage and rubbish dumps are permitted in this city. When called upon to extinguish fires thereon, we use hose lines.

I believe flammable material should be kept from these dumps.

Clyde C. Campbell, Chief, Grand Island, Neb.: We have a big ditch and the rubbish is deposited therein and burned as much as possible. We are very seldom called to extinguish the fire. The only time is when the wind blows hard. We extinguish the fire with water.

Covering with dirt is about the only method of eliminating this nuisance.

Joe Graffis, Chief, Logansport, Ind.: Open garbage and rubbish dumps are maintained by our city. If we cannot extinguish a fire thereon with a booster line, we turn the job over to the Street Department.

I believe the Water Department should lay a pipe line when the dump is started so that water supply will be on hand to fight such fires.

D. W. Brosnan, Chief, Albany, Ga.: Garbage and rubbish dumps are maintained outside the city. About once a year we are called upon to extin-

TRADE MARK

MEARL FOAM 5

FIRE OUT... Stays OUT!

The all-climate, dependable

MECHANICAL FOAM PRODUCING LIQUID

It flows — covers — seals — extinguishes

» » » Highly effective on oil and gasoline fires—

» » » Use with any kind of water—at any temperature—in all makes of equipment.

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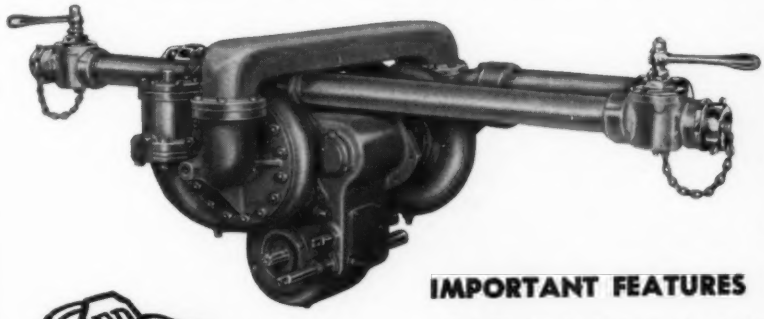
—Duplex-Multistage, Centrifugal, Midship Mounted—



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The Modern Protection Against Loss of Life by Fire

SPECIFICATIONS and FEATURES

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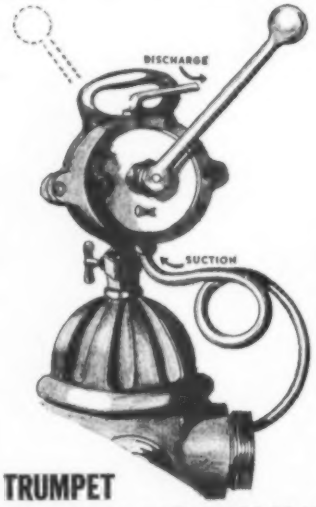
Manufacturers of Superior Life Saving Equipment and Life Nets



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A dependable, inexpensive oscillating force pump. Hand operated. Fastens securely to any pentagon or square hydrant nut. Stainless steel shaft — brass wings and valves. Convenient to use, efficient action. Write for complete information.

THE WOOSTER BRASS COMPANY
WOOSTER OHIO

HERE IS THE QUESTION FOR THE NEXT ISSUE

Several types of apparatus are today being manufactured for automatically recording telephone conversations, such recordings thus being available for reproduction whenever, and as often as, desired.

Do you believe the recording of telephoned fire alarms in this manner would prove of benefit to the Fire Department?

In what ways?

guish fires occurring thereon. We use a 500-gallon booster tank. If caught in time, we do not find them stubborn to extinguish, and have few rekindles.

I believe incinerators would be the answer to this problem.

L. B. Barnum, Chief, Phoenix, Ariz.: The City of Phoenix maintains a garbage and rubbish dump outside the city. The Fire Department is often called upon to extinguish fires occurring there. However, the fires are usually in the paper dump. If the paper is beyond salvage, we do not bother to extinguish it, unless it might be dangerous to a nearby structure.

In general, the fires are not too difficult to handle, since the trucks use only the booster line.

Cartons, paper boxes and paper that can be salvaged are pressed and baled at the dump. Non-salvaged paper is burned with the garbage.

Our suggestion for handling this nuisance would be the installation of large capacity incinerators and maintenance of a controlled twenty-four hour per day burning schedule to handle both the garbage and rubbish.

George C. Springstead, Chief, Gardena, Cal.: Thanks to the foresight of our city fathers, no garbage or rubbish dumps are allowed within the city limits.

From past experience, I have found such accumulations of combustible materials very stubborn to extinguish and many rekindles are bound to occur.

The Smog Committee, composed of Los Angeles City, Los Angeles County and all neighboring cities, are seeking to eliminate all dumps and maintain them by the cut and fill method.

C. E. Van Nattan, Chief, Colorado Springs, Colo.: An open rubbish dump is maintained by the city and is supervised. It is located out of the city limits.

Our fire department has been called upon to extinguish dump fires in the past at the dump formerly located in the city limits. Now we are called upon occasionally to extinguish fires where the city permits rubbish to be dumped along creek beds in an effort to fill them in.

We use a 2½-inch line and work from the bottom of the dump up. In

JANESVILLE QUALITY TURN OUT CLOTHING

Our turnout suits are giving excellent satisfaction in most of the large fire departments throughout the U. S. and

THERE MUST BE A REASON WHY SO MANY FIREMEN INSIST ON JANESVILLE QUALITY

NOW AVAILABLE

We can now supply old type ¾ Length and Knee Length Felt-lined Firemen's Boots.

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1837 — 1947

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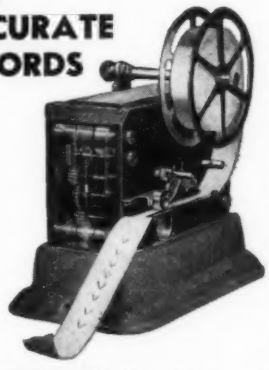

HARRINGTON PR-10

FIRE ALARM

THIS punched tape register automatically makes records of the fire alarms or other emergency signals as transmitted over such circuits, in central fire alarm stations, outlying fire stations, police department offices, water works, etc.

HARRINGTON SIGNAL COMPANY

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AT EXTREMELY LOW PRICE

WELL KNOWN MAKE
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Complete with Replacement Parts

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GORHAM
FIRE EQUIPMENT CO.

30 INDIA WHARF
BOSTON 10, MASS.

that way we can completely extinguish it.

Fires are difficult to extinguish if they are deep seated. These require lots of water. A few dump fires rekindle.

I believe the dump should be located outside of the city limits and that a man should be detailed by the city to keep all rubbish burned that is dumped.

Napoleon Ayotte, Chief, Hibbing, Minn.: Our garbage is handled in two parts. By ordinance all burnable garbage is put into one can and collected twice a week. It is then taken to a garbage disposal plant a mile from town and burned.

All cans, glass, metals and other non-burnable material are collected once a week and taken to a dump where they are burned to prevent flies or other insects. Oil is sometimes used for this purpose.

John E. Bull, Chief, Bellingham, Wash.: Our city does maintain open garbage and rubbish dumps.

In recent years we have loaned the garbage contractor our condemned hose to control their fires, unless the fire is of a menacing nature.

I would recommend the following as a remedy for dump fires:

1. That the garbage contractor be required to provide fire protection.

2. That a public incinerator for flammable refuse be maintained.

Aubrey G. Robinson, Chief, Manchester, N. H.: We have one open rubbish dump on city land about two miles from thickly settled sections and a couple of small open dumps on private land in residential sections.

We are called upon once in a great while when a fire occurs.

We use a deluge gun from a hose tender and cut in behind the fire and turn it over and forward, using a 1½-inch nozzle.

The small dumps are not too hard to handle.

The small dumps are being continually covered with dirt as the fill progresses, and this has a tendency to eliminate a lot of the fires and also stops a lot of the embers from blowing around when the fire does occur. There is only one solution and that is to prohibit dumping, but, like the rest of the cities, we have not been able to do so. We have an incinerator, but it seems as though they are fussy about what goes into it. We therefore have the large city dump for what they will not take.

A few years ago we had two large dumps that did considerable damage to property and also to a fireman from blow-ups. The city government did stop the dumping in them, and we have been pretty free from fires since.

Leonard A. Petrucelli, Chief, Meriden, Conn.: Two open garbage and rubbish dumps are maintained by the city.

When we are called upon to extinguish a fire thereon, we usually try to have a 500 gallon trailer pump take care of surface fires.

When fires have been burning for several days, the tendency of the fire is to burn down and deep. In these cases the hose streams with a pipe attachment are not much help because the fire cannot be reached. Then the only solution is to use a bulldozer to push the rubbish aside in order to get

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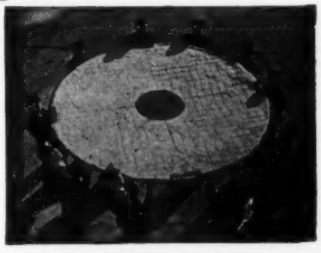

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Plant shown is Model 15 DL-14
1500 watts, 115-volt D.C.

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SIREN

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The Name of ***Dependability.*** Assuring the Firemen; ***Safety, Comfort and Wear*** in Boots ***with 19 outstanding features.***

A PRODUCT OF

BEACON FALLS RUBBER FOOTWEAR

BEACON FALLS CONN.

at the heart of the fire when hose streams are again used.

If the bulldozer opens up the rubbish piles thoroughly and hose streams are then applied, the fire will seldom rekindle.

As long as open garbage and rubbish dumps are permitted, this nuisance cannot be eliminated.

Walter L. Hydaker, Chief, Lima, Ohio: No garbage dumps are allowed but we have a municipal dump ground.

We use heavy streams for surface fires and when the fire is deep underground, the city bulldozer is used to remove surface debris, which allows us to extinguish the fire with a minimum of labor. This procedure has been very successful here at Lima. We seldom have had rekindles.

I would like to mention the method used here that prevents this type of fire from gaining much headway. As this dump is filled in and extends farther from the water supply, the water works lays a three-inch water line adjacent to the dumping area. This line has a regular 2½-inch connection. We supply old hose and a nozzle connection and when a fire does break out, nine times out of ten the men employed at the dump have it extinguished before our arrival.

Ben J. Zahn, Chief, Ann Arbor, Mich.: The question of dump fires is something of a past experience for our department. I can remember when we used to have to put out two or three dump fires a week, and once in a while we would work on one for two or three days when the fills were deep. Sometimes we would keep washing away until we reached the fire, and again, we would use long nozzles or pipes and bore into the fill until the whole area became flooded.

Dumps are no longer permitted inside our city limits and the city now rents space about two miles outside the limits where all debris has to be hauled. An attendant supervises the fill and maintains a fire for all burnable rubbish, which does not create as disagreeable an odor as it does when the fill burns deeper down, causing an offensive stench.

The garbage itself is hauled under city supervision into the country and fed to hogs.

W. B. Sykes, Chief, Portsmouth, Va.: This city maintains rubbish dumps, but all garbage and paper is supposed to be carried to the incinerator to be burned. I find that a great amount of the material finds its way to the dump. At times we have a great number of complaints about the smoke from these fires. But we do not extinguish them unless we believe that there is danger of the fire spreading or on the orders of the City Manager.

When we are called on to extinguish these fires, we send one engine and a few extra men. In most cases, I find that long lines of hose must be laid, and the nozzle has to be moved around quite a bit. Due to the fact that the fire will tunnel its way far down in the pile, and then branch off in every direction, I find that it is not only hard to extinguish this type of fire, but there is great danger of the ground giving way under the men. It is almost impossible for the water to soak into the pile to reach the fire, and high pressure has to be used in order to wash the pile away until the

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When 2½ gal. types are needed, specify the Fyr-Fyter *INSTANT*. Exclusive "loaded stream" charge 1) puts out fire faster with ⅓ the fluid, 2) quenches and fireproofs, 3) kills class A and B fires. The *INSTANT* is 4) anti-freeze, 5) needs no recharge except after use, 6) throws a strong stream.

Underwriters' Approved! Write for literature and details of Underwriters' amazing 11 second test. 1¾, 2½, 20, and 40 gals. Also special fire department models.

THE FYR-FYTER CO.

Dept. 101-34, Dayton 1, Ohio

Fyr-Fyter *Extinguishers*

seat of the fire is reached. My department has spent many hours extinguishing a dump fire, and believing that it had been extinguished, returned to quarters only to be notified several hours later that it was still on fire. Upon investigating we would find smoke coming up from the dump. This smoke may be coming from some point twenty-five to fifty feet from the point where the fire had appeared to be burning. The only way to eliminate this type of fire is to eliminate the dumps. We have tried many ways to stop these fires, but have not been successful.

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Rates are inexpensive. "For Sale," "Proposal" and "Wanted" advertising. $5 per inch insertion (10% discount allowed for three or more consecutive insertions.) FIRE ENGINEERING, *24 West 40th Street, New York 18, N. Y.*

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1. Hand operated 2 cylinder pump enclosed in open-top rectangular copper tank mounted on small wooden wheels. Name plate on pump reads as follows: #119, Patent made by Wm. P. Hunniman, Roxburg, 1826. Pump needs minor repairs and painting. Approx. wt. 1,000 lbs.

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1937 Buick Ambulance. In first class condition —new motor installed 2 months ago. Write or phone: Riviera Beach Volunteer Fire Co., Inc., Pasadena, P. O., Maryland. Phone: Sunset 77-J.

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TELEPHONES

U. S. Signal Corps field telephone units, two units per set. $22.50, used; $25.00, new. Insulated wire, 2¢ per foot. All phones guaranteed. R. S. WILLIAMS CO., 1415 Deana Street, El Monte, California.

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Fire Equipment Dealers to sell Morning Pride protected rubber firecoats, fire pants, fire mitts and fire suspenders.

Write today Morning Pride Mfg. Co., 1986 Home Ave., Dayton 7, Ohio.

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Nation-wide mutual insurance company wants man for training and supervising field engineers in fire prevention work. Must have rating bureau experience using Dean schedule. Permanent position, requires traveling. Our men know of this ad. Write Box 25, c/o FIRE ENGINEERING, 24 West 40th St., New York 17, New York.

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1½" D.J. municipal hose, $1.01 ft.

2½" D.J. municipal hose, $1.56 ft.

Includes rocker lug couplings and tested 400 pounds. New, **not surplus.**

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Order to-day.

FOR SALE

Fire hose in 50' lengths, 1½" double jacket cotton rubber lined with brass couplings, standard pipe thread only $12.50 per length; 400# tested; 1½" single jacket, $11.50 per length; 2½" single jacket, $21.00 per length, 2½" x 50' length unlined linen fire hose, cpld. N.S.T., $9.75 per length; 4" x 10' lengths suction hose, cpld., $9.50 per length; 2½" brass hose nozzles, N.S.T., $2.15 ea. Navy surplus stock, unused in original factory cartons. Top Quality brands. Maryland Mfg. & Eqpt. Company, 1 W. Alleghany Ave., Towson, Baltimore 4, Md. Phone Towson 1991.

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MACK, 1000 gallon triple combination pumper with two stage centrifugal fire pump, and all standard equipment, in first class condition, price $2500. Year 1931, situated near New York City. For particulars address, Box 35, Fire Engineering, 24 West 40th St., New York 18, New York.

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UNLINED LINEN, 2½'; 50 feet., N.S.T., @ $10.00
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● They do their work without any necessity of extra moving parts, extra waterway or holes to clog.

● In the open position they are entirely out of the way of the solid stream. In the fog position they cause deflection which fills the fog cone *solidly.*

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● This nozzle has so many applications and operates so positively in each, that it should be part of the equipment of every fire fighting unit in the nation.

ELKHART BRASS MFG. CO., INC.

Elkhart, Indiana

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OCTOBER, 1947

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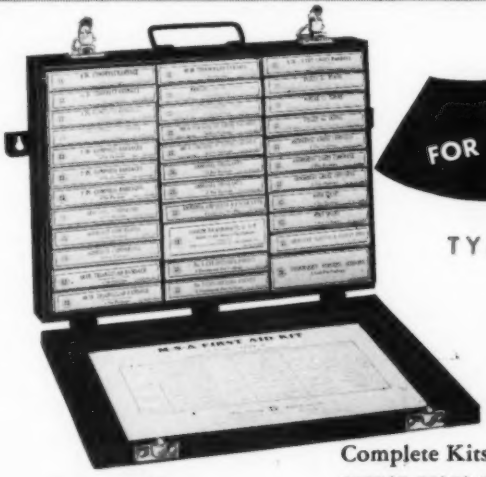

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